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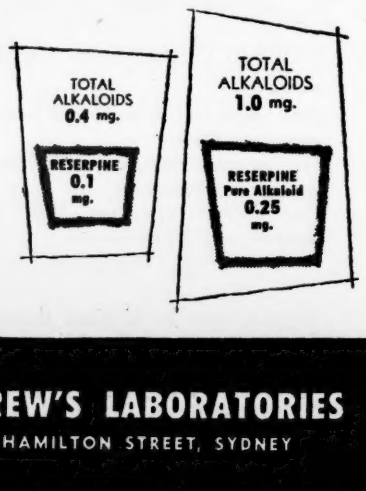

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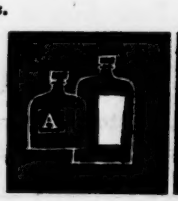

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An Address.[1]

By A. E. LEE,

President of the Queensland Branch of the British Medical Association.

I IMAGINE the preparation and delivery of a presidential address is never an easy task, and I have not found it so, even though it is the second time this honourable duty has been entrusted to me. The previous occasion was in December, 1942, and at that time, after considering the subjects that should be mentioned in such an address, I noted that the President needed to assume the triple role of propagandist, historian and prophet.

Most of this earlier address was an appeal to the medical profession to prepare itself for the tasks of post-war reconstruction, and I propose tonight to consider briefly how we have fared in the intervening years. In 1942 it was not easy to be optimistic. Though the entry of the United States into the war on our side had made eventual victory certain, and the successes of Alamein and Stalingrad were everywhere recognized as a turn of the tide in our favour, no term could yet be placed to the time of struggle.

The medical profession in Australia had submitted willingly to a conscription of its members, and the disposal of every doctor was determined by the Medical Coordination Committees and the Armed Services.

With their numbers depleted and even the travel necessary for purposes of organization exceedingly difficult, the doctors remaining in civil life had to face grave threats to the future welfare of the whole profession. In the Federal sphere a Labour Government was in office, and determined that a nationalized medical service should be introduced at the earliest moment, while in Queensland the State Government had not yet abandoned its pipe-dreams of a free medical service for the whole community by salaried doctors based on the public hospitals.

As though these external problems were not sufficient, there were also uncertainty and weaknesses within the ranks of the medical profession. The differences of opinion as to the form of medical service that would best promote the welfare of the people were so acute that in Queensland, where such planners were particularly active, at three successive Branch meetings Sir Raphael Cilento, Dr. T. A. Price and myself had each put forward different plans for its solution.

[1] Delivered at the annual meeting of the Queensland Branch of the British Medical Association on September 3, 1955.

And though it was becoming increasingly clear that Federal rather than State policies would be dominant in the post-war era, the organization that the profession had set up for negotiating on the Federal plane, the Federal Council of the British Medical Association in Australia, was suspect both as regards its composition and its policies.

Looking back on these days, I must have seemed unduly optimistic to have concluded my address with these words: "There was never a time when our profession so needed to know its own mind, that it might present an unbroken front to whatever menaces its safety, and the care of the health of the people. But granted this solidarity, with constant vigilance, keeping our powder dry, we need have no fears for our future welfare."

These proved to be no idle words, and though the history of the intervening years may be well known to many of you, it is proper to recapitulate it.

First, there was achieved an internal reorganization within the British Medical Association. Initiated by the Queensland Branch, measures were devised which enlarged the Federal Council to one more truly representative of Branch membership; while at the same time, the Branches gave it adequate powers to function as a negotiating body *vis à vis* the Federal Government. A policy for the future was devised by its Planning Committee, and accepted by all the State Branches, which resulted thereafter in implicit confidence being reposed in the revitalized Council.

Spearheaded by this body, there ensued first a period of successful opposition by the profession, a negative phase.

Successive steps of the Federal Labour Government aimed at eventual nationalization were defeated—those concerning Pharmaceutical Benefits by the High Court's finding the Act *ultra vires* the Constitution, on the ground amongst others that it embodied civil conscription of doctors; and when a referendum granted the Commonwealth sufficient powers and a *National Health Service Act* was enacted, by the subsequent (and it may well have been consequent) defeat of the Government at the polls. The innate good sense of the majority of the Australian people had determined that it desired the continuation of a free profession.

During all these years of opposition, and since, I was a member of the Federal Council, and I will always carry with me, long after the memories of the discomforts of frequent meetings in wartime have faded, memories of the tenseness of repeated conferences with Commonwealth ministers and officers, at which often most of the heavy artillery seemed ranged on their side.

Our strength lay rather in a firm belief in the essential rightness of the policies we were defending, and in a much greater technical knowledge of medical problems than that possessed by the departmental officers.

With the accession to power of the Menzies Government and the appointment as Minister for Health of a distinguished doctor and most experienced politician, Sir Earle Page, there commenced a positive phase, with the steady development of policies that have attracted the attention, and in general the admiration, of the whole world.

It must never be thought that the profession opposed the McKenna-Chifley proposals because they were formulated by a Labour Government, and approved the Page proposals because he was a Liberal-Country Party Minister.

The British Medical Association is not concerned with politics. Already in 1944 it had formulated proposals which it believed (and its members have unexampled opportunity to acquire such knowledge) would best meet the needs of the people in the coming years.

It opposed Senator McKenna because his schemes conflicted with those policies, and it supported Sir Earle Page because his proposals agreed with them in almost every detail.

The fundamental principles of the Earle Page proposals cannot be too often impressed on any audience, and I would remind you that they embody these two propositions:

1. the rehabilitation of the morale of the Australian people, weakened by the promises of free Government hand-outs, by making the individual realize that he must not depend on Government agencies for the provision of health services, but must accept a personal financial responsibility for the care of himself and his family in sickness; and
2. the rehabilitation of the crumbling public hospitals system of Australia, much of which in 1950, as the result of the operation of the Chifley policies was virtually bankrupt, by measures which would reduce its load, while at the same time improving its finances.

These principles are fundamental to the understanding of the present health service, and no amount of sophistry can reconcile them with the provision of a public hospital system open to the whole community without any direct charge to the patient.

The measures adopted by the Government to implement these principles can be summarized very briefly. The rehabilitation of individual morale was sought by encouraging, by a process of subsidy, voluntary insurance against the costs of medical and hospital care, so that the majority of the community could well afford to obtain substantial financial cover; while at the same time public hospitals were again allowed to classify patients according to their means, and to limit admission to public beds to those not able to afford private treatment. They were also allowed and indeed encouraged to make suitable charges for the services given in all departments of the hospital.

For the group in the community who could not be expected to afford even such subsidized cover, what was intended as a stop-gap system, the pensioner medical service, was established, to provide a free general practitioner service for these persons.

The rehabilitation of the public hospital system was achieved by a series of measures, and these included:

(1) an attempt to make the community healthier and so in less need of hospitals, by improving the nutrition of school-children by a daily free issue of milk;

(2) the free provision of life-saving and disease-preventing drugs, to reduce the extent of illness, and so obviate or shorten hospital attention;

(3) a determined and brilliantly successful campaign to eradicate tuberculosis within a generation; (So successful has been this campaign that in those States where the scheme was started immediately, there are now many empty beds in tuberculosis hospitals, with these States offering to take patients from without their borders.)

(4) by alterations to the Commonwealth-State hospital subsidy provisions, the restoration to public hospital administrations of the power to charge patients for services rendered to them; and

(5) by the encouragement of voluntary medical and hospital insurance, making it possible for more of the community to use private medical and hospital services, and so to reduce the load on the public hospitals; or if they must be used, to provide payment for their services.

All these measures are now in operation, and are achieving their purposes. They represent in effect a revolution in the financial provision of health services in Australia.

As showing the extent of voluntary insurance achieved in less than two years of Government subsidy, as at March 31, 1955, 44% of the Australian people numbering four million persons, were insured for medical benefits, while 55% or five million persons were covered for hospital benefits. The hospital cover ranges as high as 66% in Victoria and Western Australia, while Queensland, still saddled with its free public hospital system, has the lowest cover with 29%. In the southern States the reduction of the public hospital load and the greatly increased hospital revenues have removed entirely the threat of bankruptcy which was so real in 1950. Even in Queensland, in spite of its rapidly increasing population and the lure of free treatment, the out-patient attendance figures at the Brisbane Hospital reached a peak in 1951, from which they are slowly receding.

Side by side with these treatment measures, the financial provision for research has been greatly augmented, and large subsidies are provided by the Government and disbursed to numerous research projects throughout Australia, through the agency of the National Health and Medical Research Council, an organization set up by Sir Earle Page during his occupancy of the Treasury portfolio thirty years ago. In addition, large Federal grants are provided for the upkeep of the John Curtin School of Medicine in the National University at Canberra, where a brilliant band of research fellows is adding lustre to Australian learning.

Two steps are still necessary to complete the edifice of health services.

To the present time, the very poor, those in the pensioner group, have been separated from the rest of the community in the pensioner medical service and by the limitation of their medical care to a group of contracting doctors. Although certain difficulties were obvious, it was hoped during this year to set up a pensioner insurance scheme, which would have placed pensioners on the same basis as the rest of the community, except that their premiums would have been paid by the Government.

These proposals have failed to secure the approval of the Treasury Department, but it is certain that they have not been shelved permanently, and at least some of the present pensioner community should soon be insured and have an unlimited choice of doctor.

Finally, the tremendous problems of mental illness must be attacked. The difficulties here are indeed formidable, as was shown recently in the Stoller Report. Not only must constitutional problems affecting Commonwealth and State responsibilities be determined, but an immense building programme will be essential, as also the training of large numbers of specialist doctors, and a greatly expanded nursing and orderly service.

To sum up this account of medical activities fostered by the Federal Government, it must now be clear to you that a transformation has been attempted, and has largely succeeded, in which the method of subsidy has been used to create a situation modelled consciously on that of the United States, by which the great majority of the Australian people find themselves in a position to control their own medical care, instead of leaning on facilities provided from Government funds. Practically every question in relation to our system can be answered from American experience, which shows, for example, that in a city like Brisbane no more than 3% to 5% of its population should need to take advantage of the free provision of medical and hospital care, while the remaining 95% have secured the control of their own medical destinies either by their intrinsic financial position or by voluntary insurance methods (and this without the help of any Government subsidy). Such a city will have large hospitals, but they will be community hospitals, providing every type of accommodation according to the patient's classification. So little must the free accommodation be used that it is usually the financial responsibility of the City or County, and not at all of the State or Federal Governments.

This revolution in the finance of health services has brought to the medical profession advantages and dangers, and certainly increased responsibilities.

The first responsibility concerned a fundamental requirement of the National Health Service, the establishment of voluntary insurance schemes. It was implicit in the Government plans that these agencies should not be managed by the Civil Service, but should be independent decentralized bodies. Since they were to be non-profit organizations, they had little attraction for established life insurance offices, to whom the first approaches were made. In fact, United States experience had foretold that while persons and bodies interested in hospital management might be prepared to organize hospital insurance schemes, the provision of medical insurance had to be the doctor's own responsibility. This experience was repeated in Australia, and except for some States where friendly societies were active and enrolled large numbers of contributors, medical insurance has had to be organized by the doctors themselves.

It should interest a Queensland audience to know that 70% of all the contributors to hospital and medical insurance in this State are enrolled in a registered organization, Medical Benefits Fund of Australia, which was started by doctors, in which its total capital represents non-interest bearing, non-returnable gifts from doctors, and whose management is still predominantly in the hands of doctors assisted by contributors' representatives, all of them doing this work in an unpaid capacity.

Apart from management costs, which are limited by law to a certain percentage of income, all the moneys collected as premiums must ultimately be returned to the contributors as benefits, and the sum to be returned this year, by this one company, is likely to exceed one million pounds.

Whatever gibes may be directed at doctors, few could deny that they have acted here with almost quixotic generosity in the successful development and management of this essential part of the machinery of government policy. Of all my duties beyond the mere practice of medicine, none has so dominated my mind during recent years as those associated with my chairmanship of Medical Benefits Fund of Australia, in Queensland.

So much for the responsibilities. The advantages and the dangers of this new service reside in the fact that to an ever-increasing extent the costs of medical and hospital care are being refunded to the public by third parties, the Commonwealth Government and the registered funds.

The advantages both to the public on the one hand, and the hospitals and doctors on the other side, are obvious and need not be stressed. Perhaps the dangers are not equally obvious.

The incentives to economy, and the obtaining of the best value for money expended, are never so great as when the money comes directly out of one's pocket, and to an extent proportional to the payment by a third party do those incentives diminish. Thus the hospital patient who is paying £14 14s. per week from his own resources is far less likely to spend unnecessary days in hospital than his companion in the next bed who will receive £12 12s. per week from his benefit fund, and an additional Commonwealth weekly payment of £4 4s., and so will gain with each additional day spent in hospital. It seems to many of us highly improper that hospital benefits can thus be paid in excess of the actual charge made to the patient; and we are doing our best to alter it.

It is equally the case in medical services, that when only a small margin of the fee must be found directly by the patient, the incentive to avoid excessive treatment, whether the responsibility for this lies with the patient or the doctor, is lessened.

Other requirements of health insurance may also provide temptation to doctors. Since the payment of benefits is subject to certain conditions, relating to the length of time the insurance has been in force, and whether the illness was in evidence at or prior to the joining of the fund, certain evidence may be required from doctors in the form of certificates.

This evidence may determine whether or not comparatively large payments will be made, and it is little to be wondered that the temptation to provide an answer acceptable to the patient is sometimes hard to resist.

There is very real risk, then, that this system of benefits, designed as it was to restore the morale of the Australian people, may result in an undermining of the morals of the Australian doctor. It need hardly be stated that all the disciplinary powers available to the organized profession are being, and will continue to be, used to splint the sagging morals of our weaker brethren.

It will be seen, then, from this brief résumé, that since I expressed my optimism regarding the future in 1942, the Australian medical profession has moved from the shades of nationalization to the sunny slopes of a freedom and prosperity rarely equalled in the rest of the world. This has been accompanied by a corresponding improvement in the availability and, one believes, in the efficiency of the medical services available to the public.

Can any prophecies be made about the future? Looking into the crystal bowl, can we see a continuation of these good times beyond the immediate years ahead? The answer I see, and always assuming the continuance of peace, is "Yes, but to a diminishing degree".

When any profession or occupation attains a specially favoured position, there are at least two limiting factors which may come into play to modify that position. These are (*a*) a rush of recruits to its ranks, and (*b*) the folly of its members.

The first factor is operating already. The Australian medical schools are crowded with students, and the Sydney school, since it is prevented by law from refusing any matriculated student, is grossly overcrowded. Western Australia is just about to establish a medical school.

Looking beyond Australia, very many British doctors compare sadly their situation with that of their colleagues in Australia and New Zealand, and the more adventurous of them are likely to try their fortunes in these countries. Earlier this year I was in New Zealand, where the Secretary of the New Zealand Branch of the British Medical Association told me that every fortnight he is likely to receive 20 to 30 letters from British doctors inquiring about the conditions of practice in that country, or in many cases telling him they are actually on the way. He was inclined to regard over-crowding of the medical profession as the most urgent problem requiring intra-Commonwealth discussion.

And, finally, there is an inexhaustible pool of foreign doctors, whose admission or exclusion depends upon the whim of State politicians.

It is well to remind a partly lay audience that doctors in general, and the British Medical Association in particular, have nothing to do with the registration of doctors to practise.

This is effected in each State by an Act of Parliament, which determines the conditions of registration, and appoints as its instrument a Medical Board. If a State Government, interpreting the will of the people, decided it would so lower the standards of medical registration as to admit the graduates of German and Italian universities, it is quite possible that within a year 1000 such graduates would be seeking registration in the State. That these are not wild figures is attested by the fact that in 1952, when I was last in the United States, 2000 such graduates were seeking registration in New York State alone, and comparable numbers in other States where big cities existed. Even the necessity of passing an examination in which the great majority failed was insufficient to halt this huge influx.

The dangers of such a happening as this in Australia is likely to continue. Members of Parliament know little of medical matters, but they may know of good foreign doctors who came to Australia many years ago. They may recall the traditions of German learning; but they may not know that Hitler, by his Jewish persecutions and in other ways, destroyed the standards of medical education in Germany, from which they may take generations to recover.

The post-war experiences in England, the United States and Australia have shown convincingly that only a small minority of European-trained doctors could be registered without a serious lowering of the standards of medical practice in their community.

I have said, too, that the present position could be ruined by the folly of doctors. The dangers have been indicated of a situation where the remuneration of doctors is so largely found by a third party. The methods need not be particularized by which an unscrupulous doctor might impose on that third party, but it may be pointed out that the honesty of 90% of practitioners will not tip the scales against 10% of unscrupulous doctors, where the third party being imposed upon is the Commonwealth Government.

The determined efforts of the present Minister to alter the system of medical service to pensioners so as to provide greater safeguards against abuse is the clearest indication that a change of Government might produce very unpleasant modifications indeed.

The inescapable conclusion of these prophecies is that the future of the practice of medicine lies in the hands of its present practitioners, and will remain favourable only if they so conduct themselves as not to provoke fundamental changes in present Commonwealth policy, or in the State Acts relating to medical registration.

I must not extend this address unduly, but I should like to refer briefly to the increasing internationalization of the medical profession. In common with other professions, medical horizons have long extended beyond national boundaries, so that a doctor travelling abroad can expect to find in other countries doctors with interests and aspirations similar to his own. The literature of medicine is equally international, and just as the student in the middle ages might travel to Padua or Paris, or many other places, to sit at the feet of a matser, so still the British Commonwealth doctor prizes as one of his chief freedoms the capacity to travel to other lands to increase his medical knowledge.

But while the individual doctor could regard himself as a member of a world-wide guild, till recently his organizations were confined rigidly within national boundaries. While caring for the honour and interests of its own members, a national medical society could pay little heed to the situation of doctors in other lands, however unsatisfactory their position might be. Indeed, even to attempt to do so might have created immediate political difficulties.

Only in the case of a few great and well-endowed philanthropic organizations such as the Rockefeller Foundation, because of the gifts it offered, did jealous nations permit its operations within their boundaries. Australia itself, almost to its shame, must thank this Foundation for initiating the great attack on hookworm disease within its tropical areas.

One of the significant events of the post-war years has been the gradual development and the increasing importance of international medical organizations. Of these, the two that I will discuss tonight are the British Commonwealth Medical Conference and The World Medical Association. This very week the most important lecture of this Branch, the Bancroft Oration, was delivered in our medical school by the distinguished Secretary-General of this latter body, Dr. Louis H. Bauer.

The British Commonwealth Medical Conference arose from the ashes, if you will accept the term, of the British Empire. There was a time when every doctor within the ambit of the British power, if he belonged to a professional organization at all, was a member of the British Medical Association. But gradually, for various reasons, some nationalistic, some due to the convenience of administering their local problems by a locally controlled body, splits occurred from the British Medical Association, and a Canadian Medical Association, a South African Medical Association, an Indian Medical Association and others came into being, owning no legal attachment to the British Medical Association.

This body still remained a very powerful organization, embracing the medical professions of Great Britain and Northern Ireland, Australia and New Zealand, Central Africa, and Malaya, and a host of smaller colonies.

Though they had moved out from under its wings, the British Medical Association maintained, if not a maternal, at least a very friendly feeling towards these newer bodies; and when some of them experienced the winds of adversity, the suggestion was mooted that a periodical conference of representatives of all the medical organizations within the British Commonwealth might be helpful.

As a result the British Commonwealth Medical Conference was born, and meetings have now been held in London, Brisbane, Calcutta and Toronto, at the second and third of which, those in Brisbane and Calcutta, I had the honour to represent the British Medical Association in Australia. As showing its scope, the Brisbane Conference, in May, 1950, was attended by delegates from Great Britain, Canada, Australia, New Zealand, India, Pakistan, South Africa and Southern Rhodesia.

Though Southern Ireland was not represented on that occasion, its delegate has attended other conferences, leaving politicians to argue whether Eire is, or is not, a member of the British Commonwealth.

I am sure that these conferences have achieved results, and that they will continue as a unifying force, amongst doctors in what used to be called the British Empire.

The World Medical Association is mainly a creation of the United States. As I understand it, its formation was largely defensive, as a counterweight to an instrument of the United Nations, the World Health Organization. This latter body, composed of Government representatives from many countries, showed every indication of attempting to impose upon its member nations health policies with a decided bureaucratic and socialistic flavour. It was felt that another international body, representing not governments, but national medical organizations, was essential as a counterpoise. This body, predominantly financed by Northern American Committees, has had a triumphant career, and now, with more than 50 member associations, is carrying out a most valuable task in correlating medical conditions in various countries, enunciating principles of practice and ethics on a world scale, organizing international conferences, such as that on medical education held in London, and watching the interests of the medical professions and their patients *vis à vis* a host of alphabetical offshoots of the United Nations Organization.

The British Medical Association in Australia is proud to be a member of The World Medical Association, and especially proud that for several years past it has had one of its doctors on the Council of the Association. When the present phase of nationalism ends, and the hope of one world becomes a reality, the medical profession will be amply organized to take its place in that society.

And so to conclude. I have shown that the medical profession has shared the general prosperity of Australia in the post-war years, that it has taken its full share in the development of a National Health Service that may well serve as a world pattern, and that in doing so it has become exposed to certain risks and temptations that it must escape; but that if it can avoid any major acts of corporate folly, the winds seem set fair for its smooth passage of the years in the foreseeable future.

GENERAL PRACTICE.[1]

By A. TALBOT ROGERS,
London.

IT gives me very real pleasure to be able to be present tonight at the annual meeting of the Queensland Branch of the British Medical Association, and to bring to the Branch the greetings and the good wishes of the parent body of the Association in Britain. It has fallen to my lot to attend many annual meetings of branches of the Association, but I can truthfully say that never have I attended one before so well supported or so colourful as yours tonight, nor can I think of a better venue than you have here in these very fine new university buildings.

When your President invited me, and I agreed, to address you tonight, I thought that in view of the fact that both he and I are general practitioners, I should choose some aspect of general practice as my subject; it so happens that several years ago, at a time when in Britain one was hearing on all sides that the status and the scope of general practice were falling and that soon no youngster of talent or ambition would ever look to general practice as a career, I was talking to the Secretary of the Nuffield Trust, who is not a doctor but a barrister, and he remarked how little was really known by laymen like himself of the pattern of life of a general practitioner. He felt that it was time that someone wrote what he called "a philosophy of general practice" which, while in no way ignoring the trials and frustrations of general practice, would yet bring out its satisfactions and rewards. "What is it", he asked, "that makes general practice so satisfying a life to so many of you family doctors? Tell us that and we will be well on the way to preserving what is best in practice, and attracting worthy recruits to this branch of the profession."

Now this seemed to me a good idea, and when, some months later, I had time to spare, I sat down and tried to rough out a philosophy of general practice. But, try as I might, it came to nothing, for what was coming from my pen could possibly have been called the philosophy of a general practitioner; by no stretch of the imagination was it a philosophy of general practice. It emerged as my account of what mattered most to me in my life in my practice, and could certainly not be claimed to have any general application to countless other practitioners working in their own separate ways against practice backgrounds, which, even in Britain, differ vastly from town to country and from south to north.

Little had then been written about general practice in England. Much has been written since, as quotations I shall use later will show; but nothing I have read has done anything but confirm for me the conclusion that I then reached that there can be no single philosophy of general practice. In general practice we are individuals conducting our own practices in our own individual ways, working directly with our own patients, and adapting our methods to their needs. I hope we will ever preserve this individuality even while we strive to adapt and absorb into our practices the great advances that modern research in medicine and in technicology offer for our advantage. But though we may never expect a single satisfying philosophy of general practice, that does not mean there can be no general practitioner philosophers. Having had the privilege of meeting and getting to know your retiring President, and of reading the address which he gave to you in this hall last year, I am well assured that you have at least one such philosopher here in Queensland. In Britain, a new upsurge of interest in general practice has produced a number of such men, and it seemed to me only right that in offering you later my own thoughts on those things I value most in the content of general practice, I should illustrate and supplement my remarks from the writings of some of these men. It so happens that all those whose words I shall use are men known to me with whom I have worked, and have often argued long into the night. Perhaps before I quote them, I should introduce them to you so that not just their names but something of their personalities may be conveyed to you.

Pride of place must be given to an Australian, of whom you will probably all have heard, and who it may well be is personally known to many of you. Joseph Collings came to England immediately after the end of the last war. It was in the days before our present health service had been launched, when we in England were just beginning to recover from the disorganization of life and of practice which the war had entailed. There was something of the crusader, even of the evangelist, in the make-up of Collings. He had had brief experience of general practice in Australia and in New Zealand, and he saw the necessity for the adaptation of general practice methods so as to make available in practice the advances won by modern scientific medicine. He set himself to study practice conditions in Britain, and much that he saw surprised, depressed and appalled him. His travels led him to rural, to urban-residential and to industrial areas. He sought out busy (often overtaxed) practices, and he eventually wrote a long account of his findings and of his conclusions which was published unexpurgated in *The Lancet* on March 28, 1950. He seemed on the whole not dissatisfied with rural general practice, but some of the practices he found in the industrial areas shocked him profoundly. His reactions may be summed up in his own words:

> My observations have led me to write what is indeed a condemnation of general practice in its present form: but they have also led me to recognize the importance of general practice . . . . Instead of continuing a policy of compensating for its deficiencies, we should admit them honestly and try to correct them at their source.

He pointed out how easy it was for a man coming from his teaching hospital with sound scientific discipline to slip quickly into inadequate habits of perfunctory examination and limited treatment if he was compelled to work with undue hurry and inadequate help in unsatisfactory surroundings. He deplored the lack of planning for good general practice and sought to incite general practitioners into planning the future for themselves—a future in which he thought that group practice units of six or more doctors

[1] An address delivered at the annual meeting of the Queensland Branch of the British Medical Association on September 3, 1955.

working together from State-provided, or at least State-subsidized, premises, and employing their own staff of secretaries, nurses and technicians, would play a large part.

It must be confessed that the general practitioners of Britain did not rally to this call from Collings. In the main, Collings had a bad Press. It was pointed out that he had visited few practices, and that though he may have seen some bad ones, they were in no way characteristic of practice, even in the least favoured industrial areas. For him to generalize from them and to condemn general practice outright was carrying the zeal of the reformer too far. But though little seemed to happen as an immediate consequence of the publication of his report, there is no doubt in my mind that Collings's labours were not wasted. His reconnaissance stirred the conscience of the profession, and much that has happened since in general practice has stemmed directly from its publication. But for Collings it is unlikely that the next inquiry—that made by Dr. Stephen Hadfield—would have been undertaken so soon. Stephen Hadfield, formerly a general practitioner, is now one of the full-time assistant secretaries of the British Medical Association. This review set out to avoid the criticisms levelled at the Collings inquiry; it was launched by the British Medical Association and conducted by one of its own staff. A much larger number of practices were visited, they were chosen completely at random, and an attempt was made to check the findings of Dr. Hadfield (who conducted in person the field survey) by comparing his report with postal answers to questions like those he was asking sent to the thousands of other doctors who could not be visited. Dr. Hadfield went about his onerous task with diligent persistence, travelling to all parts of the country, asking his questions, making his observations, drawing his conclusions, and eventually writing his field survey and fighting long and successfully to publish that survey as his own objective and subjective findings without its being edited, where discrepancies arose, to match the postal inquiry, or the conclusions and recommendations of his steering committee. He studiously avoided deserving the taunt that Adlai Stevenson cynically levelled at one of his political opponents, who, he declared, had been known to end a speech by saying sonorously: "These are the conclusions on which I base my facts."

The Hadfield Report did, I believe, what it set out to do; it produced a description of a randomly chosen cross-section of general practice in 1951-1952. It put in perspective the good and the bad. It will remain for all time the most valuable source of data on the methods of practice current at the time of its compilation, and on the extent then of the availability of professional and ancillary help for the practitioner. No such authoritative information had ever before been compiled. Many of the conclusions drawn and recommendations made by the Committee have already had their effect in shaping Association policy. The Association believed that the report unquestionably showed that unsatisfactory practices were far fewer than Dr. Collings had suggested. But Dr. Collings was unrepentant. Commenting on the Hadfield Report, he suggested that Dr. Hadfield had set his sights too low, and that, had he demanded higher standards, his conclusions as to the proportion of inadequate practices would have tallied with Collings's own.

Simultaneously with Dr. Hadfield, Dr. Stephen Taylor had been carrying out his own field survey on behalf of the Nuffield Provincial Hospitals Trust. But his approach and his methods were different. He set out deliberately to seek out practices of good repute, to analyse their buildings, their equipment and their methods of practice, and to publicize those aspects worthy of imitation or adaptation in other practices. Dr. Taylor had had no previous first-hand experience of general practice. He is a medical journalist, a statistician, a former member of Parliament, and a keen student of social services and social affairs. He brought to his task vast energy, acute observation from which nothing could be hidden, and boundless child-like enthusiasm. Never before had the medical profession in Britain greater need to heed the warning of Robbie Burns: "There's a chiel amang ye taking notes." Words flowed in a cataract from his pen. In the end the Nuffield Trust published a large and handsome volume entitled "Good General Practice" that contained perhaps an eighth of what Dr. Taylor had written, but an eighth so well selected as fully to deploy the most cogent ideas and arguments accumulated in Dr. Taylor's odyssey. No longer can the Secretary of the Nuffield Trust complain of lack of information about the stuff that general practice is made of. Nor need the young aspirant to general practice, armed with Taylor's book, be starved of ideas for helping him to establish his own preferred pattern of practice.

I had the exciting and pleasurable task of being a member of the Nuffield Steering Committee that watched entranced over Stephen Taylor's tempestuous progress and put what curb it could on his exuberance. On that committee I had with me a fellow general practitioner, Geoffrey Barber, and from him, too, I shall need to quote. A rural practitioner in Great Dunmow in Essex, he typifies that group of country practitioners working in fine independence far from the main medical centres, doctors whom even Collings admitted were the salt of the medical earth. Barber was one of the prime movers in the establishment in 1950 of a Section of General Practice inside that stronghold of consultant medicine, the Royal Society of Medicine of London, a section which by its success and its high standard of debate has already done much to bring greater esteem to general practice in the metropolis. He was the first secretary of the section, and is now its president-elect. With John Hunt, Fraser Rose, George Abercrombie and myself he was later to be there at the birth of an organization destined to have even greater and more far-reaching influence upon the status and standards of general practice—the College of General Practitioners, which is already doing so much for the academic side of general practice, promoting better education for general practice, providing post-graduate education for practitioners, and encouraging research in general practice.

These then are my philosophers, but before I quote from them, let me first state for myself as simply as I can what it is I feel that general practice holds that makes it satisfying to me. I think it is the opportunity it gives for doing things in my own way for my own patients, and for going on doing so, not at one special time, but through all their lives, not for one special ailment, but in all their illnesses and tribulations, getting to know them and their families, their homes, and their jobs, their habits and their fads—in fact, being their family doctor. I want to do as much as I can for them myself, but I realize that to do so I need a variety of help, help which can extend my usefulness to them. Finally, when they are beyond help I still want to offer what solace I may to them and to those who care for them.

If I may divide this *credo* up into a number of phrases I think it may be possible to see its implications better and to show also how no part of it is new or has been overlooked by those who have written before me. First, the privilege of "doing things in my own way" carries with it a high measure of responsibility. If I, and I alone, am to decide what care is best for my patient, my standards must be high, my sense of responsibility must be dominant. Geoffrey Barber talked of this responsibility as an ideal, saying:

> It is the responsibility for a patient, even sometimes against his will; a responsibility both for him and his family, in health and in sickness, from birth to death. The kind of responsibility which makes one accept the night-call, the blizzards, the farm-tracks, the slums, because the visit of the family doctor is the one thing which is going to relieve what appears to be a hopeless situation.

No one, I believe, is fitted for general practice who is unwilling to accept this responsibility.

"For my own patients." I like feeling that certain patients regard me as their doctor and would always prefer to have my care and my advice. But no doctor can be always available, or should attempt to be. Stephen Taylor has pointed this out, saying:

> Occasionally a doctor will push the doctrine of continuity of care to absurd limits. He comes to believe that nobody but himself can ever look after his own

> patients. In his megalomanic paranoia he refuses to take holidays or time off for sickness. So over the years the quality of the medical care he gives tragically deteriorates.

Fortunately this attitude is rare, and most of us make deputizing arrangements by partnership or rota schemes. My partners and I prefer to do this within our partnership, and try to see to it that while retaining as far as is possible the "patients of our own", we still endeavour to let each patient know well more than one of the partners. Hadfield has some interesting paragraphs showing the extent to which sharing of patients varies in different practices. Both he and Taylor seem to believe that the pooling of patients interferes seriously with the continuity of observation and understanding of patients. On the other hand, nothing can be more destructive of true partnership than a jealous guarding of patients from all contact with one's partners.

"Not at one special time, but through all their lives." Surely this is the whole essence of general practice. Again, I quote Stephen Taylor:

> If there is a single unmistakable characteristic of general practice it is to be found in the continuing observation of the patient from month to month, from year to year, and from illness to illness. It is this continuity of care which enables the G.P. to make his unique contribution to medicine.

It is also the reason why the methods of general practice are not, and cannot be, those of the consultant clinic. The knowledge general practice gives of past history, the opportunities it provides for observing the effects of an illness on an individual and his family, for following up the sequelæ of illnesses, and for noting the ultimate efficacy of treatment, are as unique as they are fascinating.

"Not for one special ailment, but in all their illnesses and tribulations." This, too, is to me one of the excitements of general practice. The challenge of never knowing what call will next be made upon one. The need to be ever vigilant for that small departure from the normal, that small change in habit, in gait or appearance, that may be the first, but vital, clue to something serious that is impending. All these are, or should be, a constant stimulus. It will not have escaped your notice that I have included tribulations as well as illnesses. For today the general practitioner has not infrequently to offer social and even spiritual care to his patient. Part worldly adviser, part social provider, part father-confessor, his role is complex but inescapable.

"Getting to know them, and their families, their homes and their jobs, their habits and their fads—in fact, being their family doctor." I do not think anyone can claim to be a family doctor unless over the years he does absorb just this information about the environment that is shaping the lives of his patients. And no other doctor has our opportunity in this sphere. Again I quote Stephen Taylor:

> The G.P. can claim that his relation to his patient's homes is virtually unique. He is the only doctor to see his patients at home whenever necessary. This enables him to have a special insight into home environment, physical and emotional; such insight is important both in planning treatment and in assessing causation and prognosis.

I believe that it is in instilling, and in demonstrating the importance of these factors that the general practitioner can make and is making his chief contribution to undergraduate or early post-graduate medical education.

"To do as much as I can myself." I think this is of supreme importance. I feel strongly that it is what the doctor can do himself, particularly in the crises of life, that forges the strongest bonds between him and his patients. By this I do not mean that he should attempt tasks beyond his true capacity, such as major surgery or highly specialized investigations, but I do mean he should undertake to the full all the tasks that come within the scope of the average well-trained general practitioner. In some areas in Britain it is all too easy to unload all manner of duties and responsibilities upon hospitals or clinics, and in so far as a doctor habitually does this, his value to his patient, the esteem in which he is held, and the satisfaction he himself gains from his practice, inevitably fall. Herein I believe is one of the reasons for conditions about which Collings was impelled to write:

> General practice is now worst in close proximity to large hospital and clinical centres, and improves in both scope and quality almost in proportion to the distance away from these centres. Rural practice represents the last outpost of real family doctoring.

"To do as much as I can I need a variety of help—help which can extend my usefulness." Part of this help needs to be provided inside the practice, and Taylor particularly has much to say on the proper deployment in the practice of ancillary staff. But the general practitioner also needs frequent help for his patient from other sections of the health service, and here more than anywhere else the analysis of field inquiries and of evidence taken in the several surveys will prove most helpful. Modern methods of investigation and treatment demand ready and easily available cooperation between so many people. In all the reports, but particularly, and in greater detail, in those of Hadfield and Taylor and also in a later one published by our Ministry of Health, ways are sought of ensuring cooperation between the general practitioner, the consultant, the hospital, the medical officer of health, and his staff of midwives, health visitors and district nurses. Hadfield places foremost among his adverse impressions of practice in 1951 a lack of cohesion in the service and in the medical profession. He remarked that:

> The general practitioner, the consultant, and the public health medical officer need to get to know each other and then to learn to work in concert. There is growing up a new generation of consultants, and a still newer one of those who will become consultants. These know little of the general practitioner and are unaware of his difficulties. Neither are they aware how easily these difficulties may be increased.

My own hope and belief is that already in Britain we are seeing a greater understanding than when Hadfield wrote, and that progress towards a better coordination of hospital, public health, and general practice can and will be fostered to the benefit of all.

"Finally, when they are beyond help, I still want to offer what solace I may." I cannot hope ever to find better words to amplify this sentiment than are to be found in two short quotations from Geoffrey Barber:

> In chronic cases it is often said that nothing can be done. But general practice consists in doing something to make life as bearable as possible for the patient, and to make him live as comfortably as he can with his disability.
>
> When death comes to a household it is the way in which it is handled by the doctor which can make all the difference between black, un-relieved, and hopeless tragedy, and a sad, but natural event which draws the rest of the family closer together.

These, then, are some of the things I value most in my life as a general practitioner. I have no doubt that many among you, had you been in my place giving this address tonight, would have laid different emphasis on some of the points I have chosen to stress, or would have called attention to other points no less important which I have entirely failed to consider. There are so many sides to general practice. Each has its attraction to some one among those individualists whom we call general practitioners. But of one thing I am certain—the preservation of the best in general practice is of supreme importance; and not only because upon it depends, in the ultimate event, the safety and well-being of our patients. I believe that general practice, with all its irritations and frustrations, still contains within itself satisfactions that make it a way of life greatly to be prized. At home, the sustained efforts of the British Medical Association and the growing influence of the young College of General Practitioners are both doing much to promote and maintain high cultural and ethical standards in general practice. My short stay in Australia has already given me proof that here, in your Branches of the Association, and your Faculties of the College, equal thought and care are being given, and I am confident that, so long as these efforts last, and continue to have our loyal support, we can look to the future with all fears banished of any falling away of status, or of standards, of general practice.

OBSERVATIONS ON SEASONAL FLUCTUATIONS IN 17-KETOSTEROID OUTPUT IN THE SUBTROPICS AND TROPICS.

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ALTHOUGH 17-ketosteroids have been estimated in the urine since 1934, very little has been recorded of the effects of hot climate upon the excretion of these steroids. The adrenal has been suspected of a role in acclimatization to heat since Sundstroem reviewed the matter in 1927. Conn, Johnston and Louis (1946) and Conn (1949) have indicated that the adrenals are concerned in heat adaptation, and they show that there is some increased excretion of 17-ketosteroids during acclimatization. But Moieira, Johnson, Forbes and Consolazio (1945) did not find any improvement of human tropical performance on increasing the steroid supply by injection.

Heat was mentioned in passing, as a source of physiological strain, by Selye (1950) and by Sayers and Sayers (1949); but the effects of heat are not so clearly defined as those induced by cold, so that they have been less closely studied. However, heat stroke does activate the adrenal cortex (Haymaker, Malamud and Custer, 1947), as does fever (Forbes, 1943), and both have been analysed in some detail.

Friedmann (1954) has noted a difference of 11 milligrammes per day between the mean output of Europeans and Indians living in India. The high European output was not correlated with climate in his opinion, but seasonal change was not mentioned.

Stein, Beder, Eliot and Bass (1949), using three male subjects, reported that there were no significant changes of 17-ketosteroid output when moderate heat was applied (107° F., dry bulb thermometer). It is notable, however, that Stein's subjects showed a fall in daily output of 17-ketosteroids from the base-line during the acclimatization period of 18 sessions of five and a half hours at 107° F. (dry bulb temperature) and 89° F. (wet bulb temperature) (Table I).

TABLE I.
Excretion of 17-Ketosteroids (Milligrammes in Twenty-four Hours).

Excretion.	Subject I.	Subject II.	Subject III.
Baseline	13·7±1·2	16·4±2·9	7·5±0·9
During acclimatization ..	9·9±1·3	12·2±3·5	5·2±0·1

Subsequent cold and heat produced less effect. It appears that the heat stress used was not great, but that it did produce a fall in 17-ketosteroid excretion similar in magnitude to that reported in the present series of experiments.

In order to obtain a standard for normal adult steroid excretion levels in Queensland, 17-ketosteroids were estimated throughout the year. In addition, acute effects of heat were studied in psychrometric rooms. Some estimations of formaldehyde-producing steroids by the method of Corcoran and Page (1948) have also been undertaken in this context.

Methods.

Subjects were instructed to collect accurately timed twenty-four hour specimens of urine, and these were preserved with five millilitres of hydrochloric acid. Brisbane samples were extracted within one or two days, but samples from Manus Island occasionally took two weeks to arrive. It was shown that the amount of 17-ketosteroid decrement with time in stored urine was small (1% per week) when acid was added, but it was 8% per week without acid.

The method of estimation used was that of Zimmerman as modified by Callow, Callow and Emmens (1938). Ether was used to extract the material after acid hydrolysis. The colour correction suggested in the Medical Research Council report (1951) was employed. Duplicates agreed to 0·07 milligramme.

Seasonal Variations.

Fortnightly samples of twenty-four hours urine output were examined during twenty months from three subjects and during twelve months from four other subjects. All were healthy, young adults, aged between eighteen and forty years. There were six male subjects and one female. These subjects lived in Brisbane (coastal subtropic 27·5° south latitude) and led the semi-sedentary lives of laboratory workers.

Specimens of urine were also collected from a male, aged twenty-eight years, acclimatized to the inland tropics (22·5° south latitude), and the findings were compared from those of an immigrant, aged twenty-five years, newly arrived from Britain and living a similar life in that environment. Another series was obtained from an unacclimatized subject in the humid tropics at Manus Island (2° south latitude).

Acute hot-room exposures for seven hours at 104° F. (dry bulb temperature) were undertaken on students and laboratory staff.

Results.

Coastal Subtropics.

The seven Brisbane subjects provided 148 specimens for analysis, an average of 12·2 specimens per month.

To ascertain the day-to-day variation of 17-ketosteroid output in the Brisbane subjects, five sets of daily serial samples were analysed (Table II).

The variation in this series is less than 20% except for A.M.T. during a bout of heavy work. Dingemanse and Huis in't Veld (1950) found that hard exercise increased 17-ketosteroid excretion. The other subjects maintained sedentary habits through the sampling period.

Both sexes showed a reduction of 17-ketosteroid excretion in early autumn (Figure I). The mean excretion during January, February, March and April was 10·9 ± 1·9 milligrammes in twenty-four hours. This period was hot and humid. In the cool, dry period comprising May, June, July and August, the subjects excreted a mean of 13·5 ± 2·5 milligrammes in twenty-four hours. The difference between these means is significant at the 0·015 level.

When the results are reduced to a baseline of 1000, which represents the mean of all observations on each individual, the seasonal swings from the mean are more easily demonstrated. Figure I shows the monthly means of the group of subjects and the standard deviations of each

TABLE II.
Urinary Output of 17-Ketosteroids of Five Young Adult Subjects on Consecutive Days.

Subject.	Month.	17-Ketosteroid Output (Milligrammes in Twenty-four Hours).					
E.G.B. male	August.	13·4	13·9	13·8	15·0	14·6	—
G.H.K. male	August.	10·4	9·4	9·6	9·3	9·0	8·5
A.M.T. male	August.	15·3	15·4	15·1	14·2	17·6[1]	19·3[1]
B.J.E. female	August.	8·5	9·5	9·4	8·6	8·0	9·3
K.W.R. female	September.	9·3	9·4	9·9	10·1	—	—

[1] Week-end heavy manual work.

month's samples. There is a 32·5% difference between the March mean and that for August. These two months were subjectively the most unpleasantly hot, and the coldest, respectively, for the year. In addition, there is a clear secular trend from low summer and autumn values to high winter output.

The two most humid and hot months (February and March) and the two coldest months (July and August) may be contrasted. The mean for February and March (867 ± 151) differs from that for July and August (1140 ± 187) by 27·3%. This difference is significant at the 0·001 level; $t = 6·2$ for 56 degrees of freedom.

Dry Tropics.

Two young men of similar age and occupation were studied at Winton (22·5° south latitude and 400 miles from the east coast), where summer temperatures reach 115° F. with 20% relative humidity, and winter temperatures fall to 30° to 40° F. One subject had lived constantly for four years in the tropics; the other was newly arrived from Britain, in January, so that he left a northern winter for the hottest part of the summer in Queensland (Table III). Both subjects showed a depression of the 17-ketosteroid output late in summer, followed by increases again when the colder weather arrived in late April and May. The unacclimatized subject produced higher than normal amounts of 17-ketosteroids initially during his acclimatization period, but the excretion of 17-ketosteroids fell to low values of nine to ten milligrammes per day while the heat persisted in March and April. His output rose again with colder weather, which came quite suddenly in April (April minimum temperature 70·1° F., May 61·2° F.).

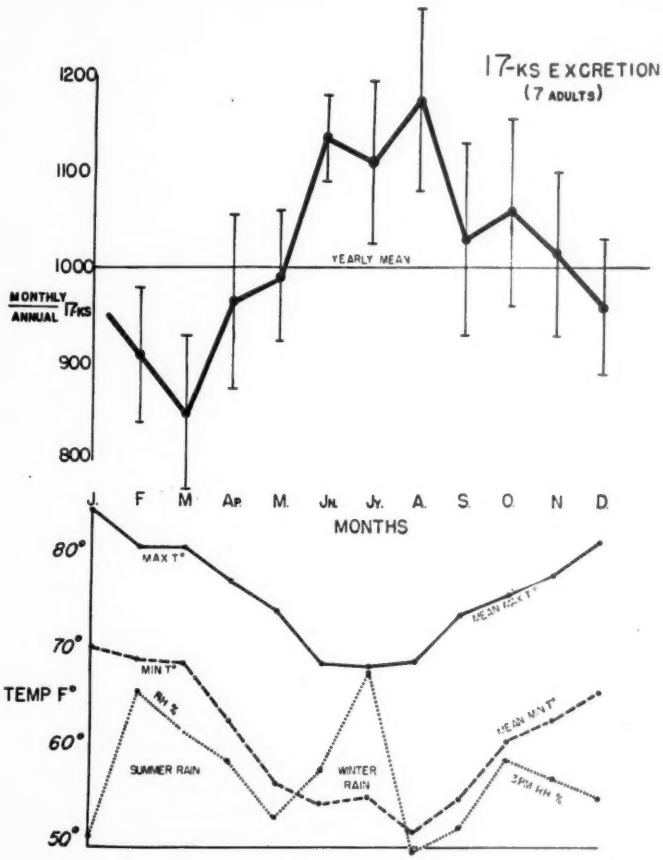

FIGURE I.

The mean 17-ketosteroid output for the year of each of seven subjects is designated 1000. Deviations from this mean, and their monthly standard deviations, are plotted in the upper curve. The lower curves show monthly mean maxima and minima of temperature in Brisbane for 1950, and the mean monthly 3 p.m. relative humidity is shown in the lowest curve.

Humid Tropics.

A young woman, aged nineteen years, complaining of undue growth of facial hair, was thought to have an overactive adrenal gland when estimations were made of her 17-ketosteroid output during winter in Brisbane. She returned for the summer to Innisfail (18° south latitude), where the 17-ketosteroid excretion fell within the normal female range. On her return to Brisbane in late autumn the excretion rate rose again (Table IV). She showed a higher excretion of 17-ketosteroids in Brisbane during the winter and spring than in Innisfail during summer. The formaldehyde-producing steroid output showed a reciprocal relationship with the 17-ketosteroid excretion. No other sign of possible adrenal disturbance was found.

Another subject providing data from the humid tropics was the medical officer on Manus Island (2° south latitude). The climate of Manus Island is monsoonal, with high humidity during the rains; but there is little seasonal fluctuation of temperature from the mean monthly maximum of 88° to 91° F. The mean minimum temperature is 72° F. The rainfall averages 13 inches per month, with the peak in winter. The initial level of excretion was twice that which occurred after six months on the island during the summer. There was some rise of 17-ketosteroid output in the wetter and slightly cooler winter period, but the full seasonal cycle was not completed. The figures for this subject, in milligrammes per twenty-four hours, are as follows:

On arrival,

September 5	19·3
October 11	16·8
November 7	11·4
November 21	16·3
December 4	10·8
January 14	11·9
February 26	8·9
May 28	12·4
June 6	16·0

Acute Exposure to Heat.

Healthy students of European stock were subjected to a temperature of 105° F. (dry bulb), 85° F. (wet bulb) for seven hours. There were 31 male and nine female subjects, with ages ranging from eighteen to twenty-three years. Urine collected during the day prior to the experiment was analysed and compared with the twenty-four hour specimens obtained during and after heating of the subjects. The males excreted means of 14·3 ± 4·5 milligrammes on the control day and 12·1 ± 4·1 milligrammes on the day of seven hours' heating. This difference of the means is significant at the 0·05 level, by the t test. The nine females excreted 9·6 ± 3·2 milligrammes on the control day and 9·2 ± 2·3 milligrammes on the hot-room day. This difference is not significant.

In another series of experiments with eight male subjects in dry bulb temperatures over 110° F. it was found that there was a mean decrease relative to the control day of 1·0 milligramme in the excretion of each of six subjects who were relatively unaffected by seven hours' heating. Two subjects, on the other hand, who were incoordinated and approaching collapse showed increases of 1·5 and 1·2 milligrammes in twenty-four hours.

Urine Volumes.

The volumes of urine passed during twenty-four hours at different seasons are spread over a wide range,

depending upon the habits of the individual adult subjects. But there is a consistent reduction of volume passed by all subjects during the summer. The correlation between urine volume and 17-ketosteroid excretion in any individual is low ($r = 0{\cdot}07 - 0{\cdot}23$), and the two appear to vary independently. When the mean of the sample population's urinary volume is correlated at the different seasons with 17-ketosteroid output, there is a higher correlation. This

TABLE III.

Urinary Output of 17-Ketosteroids (Milligrammes in Twenty-four Hours) in Two Male Subjects Living at Winton (22·5° South Latitude).

Date.	Acclimatized Subject.	Unacclimatized Subject.	Monthly Mean Maximum Temperature. (Degrees Fahrenheit.)	Monthly Mean Minimum Temperature. (Degrees Fahrenheit.)
November 14 ..	15·2	At sea.	96·4	65·0
November 30 ..	13·1	At sea.	96·4	65·0
January 23 ..	11·9	34·4	95·5	71·9
February 7 ..	11·8	29·1	91·8	71·8
March 13 ..	12·0	17·8	87·6	71·0
March 20 ..	10·0	9·3	87·6	70·1
April 3	8·6	10·1	82·6	61·2
April 20	17·8	24·7	82·6	61·2
May 11	17·5	32·8	82·0	53·7
May 23	14·6	27·7	82·0	53·7
June 10	—	29·1	72·0	47·2

may be due to the response of both to hot weather; but it is unlikely that the low urine volume is the cause of the low 17-ketosteroid level.

Discussion.

These measurements on normal acclimatized subjects in the subtropics indicate that some notice should be taken of the season if 17-ketosteroids are to be considered as diagnostic aids in adrenal dysfunction. When unacclimatized subjects are involved there is evidence that an initial increase of 17-ketosteroid output occurs in the tropics, to reach levels which are out of the normal range for people not subjected to environmental extremes. After the acclimatization period the seasonal cycle is assumed. There is evidence that there is a dual effect of heat on 17-ketosteroid output. The excretion may increase during the acute stress and during acclimatization. On the other hand, mild heating of acclimatized males (at 95° to 105° F., dry bulb) depresses 17-ketosteroid output both in the acute episode and during the seasonal cycle of high temperatures. If these interpretations are correct, it is likely that some part of the adrenal steroid output is depressed in the hot season. Each subject has a level of 17-ketosteroid output which is, within limits, characteristic and individual. In a survey such as that reported many variables have been uncontrolled (for example, infection, exercise) and others incompletely so (alcohol and food intake, emotional disturbance). There are, therefore, wide standard deviations.

TABLE IV.

17-Ketosteroid Excretion of a Girl Aged Nineteen Years in Brisbane and Innisfail.

Place and Latitude.	Month.	17-Ketosteroids. (Milligrammes in Twenty-four Hours.)	Formaldehydogenic Steroids. (Milligrammes in Twenty-Four Hours.)	Mean Monthly Maximum Temperature. (Degrees Fahrenheit.)	Mean Monthly Minimum Temperature. (Degrees Fahrenheit.)
Brisbane; 27·5° south latitude.	July ..	24·3 30·5		68	56
	August ..	25·2 27·0	1·05	69	51
	September	27·4		74	55
Innisfail; 18° south latitude.	October ..	11·1	1·64	80	67
	November	7·0		87	70
	December	13·6	2·37	92	73
Brisbane; 27·5° south latitude.	April ..	18·1	0·59	79	58
	May ..	16·8	0·40	72	52
	June ..	20·2	0·33	69	50

However, there is a clear seasonal trend in the means. The mechanism of this reduction during late summer which occurs in both males and females, and which is also seen in the results of Stein *et alii* (1949), is not clear. There are several possibilities. The adrenals and testes could release less steroid. This is possible, since there are reduced metabolism and reduced activity in the hot season. The greater depression of 17-ketosteroid output by heat in males than in females suggests that the testosterone type of steroid may be more readily reduced in amount than other fractions. In heat acclimatization the aldosterone fraction should be increased; but there is also the possibility of a biological rhythm which is not necessarily determined by temperature. Destruction of 17-ketosteroids in the liver, or failure of hepatic transformation of adrenal steroids to 17-ketosteroids, is a possibility for which no evidence exists. It is not clear by what mechanism 17-ketosteroid levels in the urine are regulated. There is a reduced blood flow through the kidney in a hot environment, but it is unlikely that reduced filtration would alter the 17-ketosteroid clearance. Renal resorption of these steroids might be increased during summer, but this has not yet been measured. There is also the possibility of seasonal variation in foods containing carotenoids, which can give a Zimmermann reaction; but this is not easily reconciled with the effects of acute heating.

Some interest attaches to the observation that the lowest 17-ketosteroid excretion occurs two to three months after midsummer in Brisbane. Part of the background of this sequence may be the thermal load imposed by high humidities in February and March. The other likely cause is the reduction in steroid output only on accumulated exposure to subtropical temperatures. The trend of changes shown in Figure I indicates that there is a slow response to the range of temperatures encountered naturally. The acute exposures (dry bulb 105°, wet bulb 85° F.) were more severe strains than are normally met in the subtropics, and with a little higher heat load (110° F.) there was an increase in 17-ketosteroid output. During winter in Germany the occurrence of a dry Föhn wind increased the 17-ketosteroid output by a factor of more than two in two subjects studied by Uters, Hofschlaeger, Anton and Zimmermann (1951). This was probably a stress reaction similar to the effect of much higher temperatures on heat-acclimatized subjects. Both seasonal and acute reactions to the environment are possible.

Summary.

1. The excretion of 17-ketosteroids has been followed fortnightly in seven subjects over twenty months in Brisbane. There was a mean reduction of 27·3% during February and March relative to July and August, and this difference has less than one chance in 1000 of being random.

2. Subjects being acclimatized in the tropics showed an initial increase of 17-ketosteroid output followed by a decrease during summer and a rise again in winter.

3. Acute exposure to a hot environment (105° F. dry bulb, 85° F. wet bulb) for seven hours produced a fall of 15·4% in males and 4·2% in females for the twenty-four hours' excretion of 17-ketosteroids.

4. Thirty-one males, aged eighteen to twenty-three years, during summer, showed a mean 17-ketosteroid excretion of $14{\cdot}3 \pm 4{\cdot}5$ milligrammes in twenty-four hours; nine females, aged eighteen to twenty years, excreted a mean of $9{\cdot}6 \pm 3{\cdot}2$ milligrammes in twenty-four hours; six older males, aged twenty-one to forty years, excreted a mean of $13{\cdot}2 \pm 3{\cdot}5$ milligrammes in twenty-four hours throughout the year.

Acknowledgements.

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REHABILITATION: PROBLEMS AND PROSPECTS.[1]

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REHABILITATION is a branch of medical practice incorporating techniques based on the principles of physical medicine, some as old as mankind itself. It is a responsibility of the medical profession. The well-being of this specialty of physical medicine and rehabilitation can be ensured only if it is not neglected or unduly influenced by wrongful forces.

The specialty has a task to perform, in which its relations with the community and the latter's organizations must be close, and of an order not envisaged, as McBride (1952) puts it, in the "horse and buggy" days of medicine. In this task it goes far to meet the following paradox referred to by Saint (1955):

> Here then, is a paradox which is not easily soluble. Hospitals are becoming, as it were, better and better repair shops for a society, used to the principle of the survival of the fittest, which has not yet learnt to make the fullest use of patched up bodies and minds.

In this paper I shall refer briefly to the background of rehabilitation, define its functions, and then discuss the problems confronting it. From this discussion certain recommendations will follow.

The opinions expressed are not original. They are the result of experience gained during twelve months' tenure of a fellowship in physical medicine and rehabilitation at the Mayo Clinic, under Dr. F. H. Krusen, and in rheumatology under Dr. P. S. Hench and Dr. C. H. Slocumb, to which experience was added that gained in a series of planned visits to leading centres of rehabilitation in parts of America, in Toronto, in Copenhagen and in Britain. At each centre I had the valuable privilege of discussing with the director the practices and problems of that centre. (A list of centres visited is given in the appendix.)

[1] Read at a meeting of the Queensland Branch of the British Medical Association on May 6, 1955.

Part I: Physical Medicine and Rehabilitation.

Definition.

The word "rehabilitation" has entered the medical and medico-political vernacular; it is at times given a variety of meanings, yet there is probably as universal acceptance of its definition, "the preparation of the patient physically, mentally, socially and vocationally for the fullest possible life compatible with his abilities and disabilities", as there is belief in the philosophy that underlies all efforts at rehabilitation.

It is apposite to refer to the background of rehabilitation, to its birth under Robert Jones and its subsequent demise, and to its rebirth out of the grim necessity in World War II to conserve the most precious of our possessions—human resources. Equally is it necessary to recall the lessons learnt.

Rusk (1951), then in charge of rehabilitation in the United States Air Force, reported:

> The Army Air Force program actually started these measures (rehabilitation) while the man was acutely ill and followed through the front door of the hospital and back to the job. . . . Management of the "patient" was vested in trained medical directors, the directors of Convalescent Rehabilitation programs—the "third phase" of medicine.

This is reiterated by others—for example, Krusen (1951):

> Reconditioning of the sick or disabled person begins at the moment of the disability and ends only when the patient is completely readjusted in a suitable normal activity. The management of this period of transition from sickness to health is the physician's responsibility from beginning to end.

The term "physical medicine and rehabilitation" was adopted by the American Medical Association in 1949.

In Britain the term "physical medicine" is coming to indicate physical medicine and rehabilitation. Thus in 1950 F. C. Cooksey, O.B.E., M.D., physician-in-charge of the Department of Physical Medicine of King's College Hospital, London, in a statement on consultant services in physical medicine prepared for the National Health Service, wrote as follows:

> Physical medicine comprises within its field the work of medical practitioners specialising in the achievement and maintenance of health through physical education; the restoration to health and efficiency, after sickness or injury; through medical rehabilitation, the conservation and maintenance of function in degenerative and disabling conditions; the development, co-ordination and clinical supervision of physiotherapy, remedial gymnastics, occupational therapy, and associated social services.

Practice.

What should rehabilitation mean in practice?

It is only natural that such a question should be asked, and this for several reasons. Perhaps the most important is that, by and large, rehabilitation must be based on a properly staffed and equipped hospital department of physical medicine and rehabilitation; and it is only in the work of such a department that an acquaintance can be made with rehabilitation in its proper form.

Such departments exist overseas, and we should emulate them in our practice. Such departments combine and integrate under the physician-in-charge physiotherapy, occupational therapy and medical social worker services, and have within easy access X-ray and clinical pathology departments, and brace-maker and surgical boot-repair facilities. Such departments have in-patient and out-patient accommodation, and adequate secretarial and record-keeping facilities. Architecturally, such departments are unified. Inasmuch as such a department is basically a clinical centre, it is essential for it to engage in teaching

and research. When it is divorced from these vital functions the work that it does suffers.

The Commonwealth Government has done well in establishing rehabilitation in Australia; but the work must be coordinated with major hospitals, as has been described above (Figure I).

FIGURE I.

Disabilities Concerned.

The disabilities which are commonly the concern of the physical medicine and rehabilitation department, but not its exclusive concern, are as follows: "rheumatism and arthritis"; certain injuries to and disease of bones and joints; certain neurological diseases, including poliomyelitis, cerebral vascular accident, *paralysis agitans*, disseminated sclerosis; chronic respiratory insufficiency (for example, advanced emphysema). For instance, at the Mayo Clinic, one patient in every nine received treatment in the physical medicine and rehabilitation section.

In elaboration of the phrase "not the exclusive concern", it must be stated that many patients, mainly those whose disabilities are not great, may be satisfactorily managed, each by his or her private practitioner.

Finally, certain conditions, such as the following, require for their adequate management specialized self-contained facilities: blindness, deafness, tuberculosis, infantile cerebral palsy, mental disease, and paraplegia. Geriatric units should be provided, with access to the facilities of a general hospital, as an annotation (1955) recently pointed out.

A Warning and a Plea.

Nothing derogatory is intended in the following remarks, which are made only after much thought, and I have in mind the valuable work already done by individual practitioners and others whose efforts have been directed to rehabilitation.

If the medical profession and its leaders are loath or slow to take up the problem presented by lack of adequate provision for rehabilitation, then others may take over the task and approach it from a different point. The task may not be well done, the methods used and results not all that is to be desired, and the community—patient, public and profession—will be so much the worse thereby.

Again, some orthopædists and physicians may have to resolve their doubts or jealousies, and accept openheartedly or adopt the new specialty of physical medicine and rehabilitation, just as, a generation ago, some general surgeons by force of circumstance had to accept or adopt the then new specialty of orthopædics, when, in its turn, it arose to satisfy a need (Krusen, 1950).

Finally, and very importantly, those empowered and entrusted with the financing and management of the teaching hospitals, and their advisers, must appreciate what rehabilitation means and must realize that a properly staffed and equipped department of physical medicine and rehabilitation is essential.

Certain findings of President Eisenhower's "President's Commission on the Health Needs of the Nation" apply to our own practice. The Commission pointed out (Krusen, 1954):

> The first principle is that the care of the chronically ill must be brought up to the standard of the care given to persons with acute illness. Shoddy facilities are still being used for the care of the chronically ill, and the shoddy attitudes that still characterise a part of the general public and a rear-guard of professional groups can no longer be tolerated.
>
> The second principle is that "The care of the chronically ill is inseparable from general medical care", that one weaves through the other. Therefore facilities and services for the chronically ill should be planned in close administrative, professional and geographic affiliation with general hospitals, and, where feasible, with medical schools.

My plea is that hospital authorities and leaders of the profession will give this problem the attention it awaits, and that between the older specialties and the newest there may be the closest cooperation.

Part II: Rehabilitation and the Community.

Community Interest and Responsibility.

As elsewhere in the world, efforts at rehabilitation have been made spasmodically, and there exist various charitable organizations, State-subsidized agencies, and Commonwealth Government departments. They all devote attention to different aspects of the problems of the disabled in the community. It would doubtless be of some advantage to ensure and facilitate coordination of these efforts where practicable.

Community support is vital for rehabilitation, but government authorities, leaders of commerce, of industry, and of labour, and the profession, first need to understand the purposes and some of the problems of rehabilitation.

It is obvious, moreover, that an up-to-date survey should be made (i) of disabled persons in the community, (ii) of the facilities of existing voluntary and government agencies, and (iii) of the potential labour market for so-called disabled persons.

Until such a survey is made, so much of the effort and money spent on rehabilitation may be wasted, planning will lack enlightenment and results will suffer accordingly.

Workers' Compensation Scheme.

Rehabilitation has an important role to play in any workers' compensation scheme. Three methods of arranging for the overall treatment of the injured workman warrant close attention. They are seen in the functioning of, and in the reports of, the following organizations: Vauxhall Motors Rehabilitation Unit, Luton, England (Plewes *et alii*, 1948); the Rehabilitation Centre of the Liberty Mutual Insurance Company, Boston, U.S.A. (booklet); Malton Rehabilitation Centre of the Workmen's Compensation Board of Ontario, Canada (Young, 1952).

Burniston (1953) made similar observations and also made the following statement:

> We can learn a great deal from overseas countries in their rehabilitation methods in hospitals and in industry to hasten the early return to employment of injured workers. In the large hospitals of Britain and America we find the rehabilitation department an integral part of treatment facilities.

Job-Finding.

For the most part job-finding for the disabled is in the hands of the Commonwealth Employment Service, a section of the Commonwealth Department of Labour and National Service. The result is that whereas job-finding is best handled on an individual basis, under medical supervision,

by the patient and by ancillary workers who have a medical background to their training, and a sound knowledge of the abilities and disabilities, inclinations and vocational capacities of the particular patient, yet a "third party" undertakes this duty. Willingness is no substitute for background, special training and continuity of control by the patient's physician. Despite the wish to cooperate, the Commonwealth Employment Service is not directly answerable to the body which at present controls rehabilitation—the Commonwealth Department of Social Services. Between these two stools, the disabled person is likely to fall to the ground—back into unemployment and perhaps into ill health.

The difficulties which hamper the return to work of the disabled person are great. There has been much cooperation from employers and from trades unions in the past. However, there is no doubt that there is an urgent need for greater acquiescence in the needs of rehabilitation.

When possible, the disabled person must be trained so that he has a skill to sell. Conversely, there is also a need for sheltered workshops. Those of Britain and South Africa are functioning satisfactorily and playing a useful and necessary role.

Rusk (1952) has shown that the gap must be closed and the lag eliminated between the so-called medical rehabilitation itself and service and social opportunity in the community. "Closing the gap" has been shown to be a sound economic venture, in which, as Rusk puts it, "rehabilitation pays dividends". It scarcely needs to be pointed out that it is a humane one.

Control of Rehabilitation.

The physician-in-charge of rehabilitation should be in charge to the extent that he is the one responsible for the work of the unit. The ancillary staff—nurses, therapists, instructors, social workers, employment officers and clerical staff—should be therefore in his charge, and if their work satisfies him it should not need to satisfy anyone else.

This unified medical control will be found in the best rehabilitation units—for instance, in the paraplegic units of Stoke Mandeville and of the Canadian Paraplegic Association; in the Rehabilitation Institute of the New York University—Bellevue Medical Centre; in King's College Hospital, London.

Part III: Recommendations.

It is recommended that if the community is to profit as it should from experience already gained in rehabilitation, the following measures should be taken.

1. A survey of disability in the community and of available resources should be made. This has been dealt with *in brief* above.

2. Rehabilitation should be conducted under a special rehabilitation department, as a separate medical department of the Commonwealth Government, with its own medical director-general.

3. Rehabilitation should be based on major hospitals.

There are two prerequisites: (i) that the hospital contain a properly staffed and equipped department of physical medicine and rehabilitation, as described above; (ii) that *the cooperation of the various hospitals concerned is* forthcoming. In the latter regard, no doubt, such matters as appointments to the proposed departments of physical medicine and rehabilitation and finance would have to be made jointly by the Commonwealth Government and the *hospital management concerned. Two further comments* need to be made. In England, for numerous small hospitals, convalescent rehabilitation centres arose—for instance, the Garston Manor Rehabilitation Centre or its Edinburgh counterpart, the Astley Ainslie Convalescent Hospital. *Such centres are, as are the geriatric units* already referred to, supplementary to departments of physical medicine and rehabilitation.

Secondly, the remark that rehabilitation should be conducted away from the atmosphere of a hospital is worthless. Experience abroad indicates that a "non-hospital" atmosphere can be secured within departments of physical medicine and rehabilitation. For instance, two floors of a new fourteen-story hospital unit, an extension of the University of Minnesota Teaching Hospital, will be devoted to physical medicine and rehabilitation; King's College Hospital contains what is perhaps one of the best rehabilitation departments of its type in Britain; the Institute of Physical Medicine and Rehabilitation of the New York University—Bellevue Medical Centre—is closely integrated with the rest of the medical centre. From a broadcast statement attributed to the Director-General of Social Services, I understand that the Commonwealth Government desires to see established rehabilitation departments within hospitals.

4. Information should be prepared by some responsible medical authority for the education both of the profession and of those groups in the community whose cooperation is needed for the success of rehabilitation. Some excellent documentary films prepared overseas would serve well as a nucleus.

5. The methods of financing and administering the scheme should in no way compromise the medical control of rehabilitation. It should be possible for the physician-in-charge to be responsible through the director-general to a ministerial controlling body, and to be provided with such advice on treasury matters as may be necessary. *Liaison with whatever body is concerned with pensions,* payments *et cetera* should not be difficult to effect.

6. *The matter of entry by the Government upon this* form of medical practice should be discussed with representatives of the medical profession together with practitioners *well informed on rehabilitation. A rehabilitation* scheme should supplement, and not supplant, private practice. *There should be adequate safeguard against* abuse of the scheme by any group—lay, political or professional.

7. Leading British and American physicians in the field of physical medicine and rehabilitation should be asked to *inspect and advise on rehabilitation in Australia. The* expense incurred in such an undertaking would constitute a small enough investment for the future excellence of rehabilitation and the avoidance of costly mistakes.

Two observations of Kendall (1954) help to show the matter in true perspective:

> . . . a flexible approach, and greater stress on existing *facilities . . . leads us inevitably to a consideration of* the community hospital as a starting point for a civilian rehabilitation centre.

> . . . Rehabilitation is something which takes place in a community rather than in a building; . . . while the *physical plant furnishes an important central point* for diagnosis, treatment, psychosocial and economic guidance, the actual channels of rehabilitation process *extend to all the facets of community life, i.e. the* family, the school, the job, the church, the fraternal organisation and the social club.

The lack of properly staffed and equipped departments of physical medicine and rehabilitation in our major hospitals, *the lack of awareness by many members of the pro*fession and others of the purposes and problems of rehabilitation, the lack of coordination between the State medical systems and the present rehabilitation service of the Commonwealth Department of Social Services, the *deficiencies of the latter—these present a challenge to the* profession, a test of its ability to appreciate and to face this problem, a challenge to it to undertake new responsibilities in the care of the health of the community. May it not be found wanting.

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Appendix.

Minneapolis.—Physical Medicine and Rehabilitation Department of the University of Minnesota Teaching Hospital (Dr. F. Kottke).

Toronto.—Paraplegic Centre, Lyndhurst Lodge (Dr. T. A. Jousse). Veterans Affairs Hospital, "Sunnybrooke": Prosthetic Service; Physiotherapy Department; Rheumatology Unit (Dr. Wallace Graham, Dr. T. A. Jousse). Workmen's Compensation Board Rehabilitation Centre (Dr. B. H. Young).

Cleveland.—Physical Medicine and Rehabilitation Department of the Cleveland Clinic, Cleveland, Ohio (Dr. P. Nelson). The Rose Marie Centre for Spastic Children, Cleveland.

Washington, D.C.—The National Institute for Arthritis and Metabolic Diseases (Dr. Russell Wilder, Dr. J. J. Bunim).

Boston.—Medical Unit, Massachusetts General Hospital (Dr. Walter Bauer). The "Liberty Mutual" Rehabilitation Centre.

New York.—Physical Medicine and Rehabilitation Department of the Bellevue Hospital. Institute of Physical Medicine and Rehabilitation of the New York University—Bellevue Medical Centre (Dr. Deaver).

London.—Physical medicine departments of the following: King's College Hospital (Dr. F. C. Cooksey), The London Hospital (Dr. W. Tegner), University College Hospital (Dr. Hugh Burt), Saint Thomas's Hospital (Dr. P. Bauwens).

Other Centres in England.—Roehampton Limb-fitting Centre; Spinal Injuries Unit, Stoke Mandeville (Dr. L. Guttmann); Vauxhall Motors Rehabilitation Unit (Dr. Thompson, Mr. Newell); Dorset House School of Occupational Therapy, Oxford; Garston Manor Rehabilitation Centre (Dr. C. J. S. O'Malley); Physical Medicine Department, Addenbrooke's Hospital, Cambridge (Dr. Fell); Royal National Hospital for Rheumatic Disease, and Rheumatism Research Unit, Bath (Dr. G. D. Kersley).

Scotland.—Northern General Hospital Rheumatism Research Unit, Edinburgh (Dr. J. J. R. Duthie); Department of Health for Scotland (Dr. J. Inch); The Astley Ainslie Convalescent Rehabilitation Unit (Dr. John Fraser).

Copenhagen, Denmark.—Department of Physical Medicine, Community Hospital; Poliomyelitis Clinic (Dr. Sven Clemmesen); Orthopædic Hospital: Physiotherapy Department: Unit for Spastic Children (Dr. Sven Klaer).

Reports of Cases.

ADRENALECTOMY IN METASTATIC BREAST CANCER: A REPORT OF SIX CASES.

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IN view of some hopeful reports of the effect of adrenalectomy in advanced carcinoma of the breast, it is important that the later results in groups of cases be published, whether encouraging or disappointing. The life history of each case of cancer runs an even course and is characteristic of that patient. A number of patients may run a similar course, but in others the course is entirely different, and it is against this background of the life history of the disease in that patient that the effect of adrenalectomy must be assessed. In some cases, metastatic breast cancer affects the soft tissues predominantly, in others the skeleton. In this report the six cases are presented in three divisions—two in which soft-tissue invasion was predominant, one in which rapid skeletal involvement occurred and three in which there was slow skeletal replacement.

SOFT-TISSUE INVOLVEMENT.

The first two cases are examples of infiltration and metastases in soft tissues.

Case I.

Mrs. A., aged twenty-eight years, underwent a radical excision of the left breast in September, 1953. In August, 1954, she presented with extensive metastases, the upper portion of the left side of the chest *en cuirasse*, the right breast being solid with infiltration, and with enlarged glands in the right axilla and the right supraclavicular region. The left lung was most extensively infiltrated. There was probable carcinomatous involvement of the liver. In September, 1954, both ovaries and both adrenals were removed. In October, 1954, the liver was enormously enlarged. The right arm was indurated and swollen. The left lung was almost solid. She died after several months.

Comment.

In this case adrenalectomy and oophorectomy made not the least alteration in the course. No alteration was seen in the soft-tissue lesions.

Case II.

The next patient, Mrs. M., was aged fifty-one years in 1952, when she presented with an advanced carcinoma of the outer quadrant of the right breast with some œdema of the lower inner quadrant, and axillary glands involved high towards the apex. A radical excision of the right breast and glands was performed. Radiotherapy was given. In 1953 she complained of pain in the right side of the neck and in the right arm, and cervical osteoarthritis was found to be present. Radiotherapy gave relief. In March, 1954, she had a dry, hard cough, and dyspnœa on exertion. Radiological examination of the chest revealed diffuse fine infiltration of both lungs, which was thought to be malignant. Later in that month, bilateral removal of the ovaries and adrenals was performed. In July, the cough had returned and there were signs of involvement of the lungs. The radiological changes noted in February in both lungs persisted, but were somewhat less pronounced. Also, the small effusion previously present in the base of the left lung was no longer evident. The increased reticular markings were still evident, but there was no pulmonary consolidation, nor was there any hilar glandular enlargement. These changes could have been due to long-standing chronic bronchitis.

In October, 1954, there was evidence of a small pleural effusion at the base of the right lung. The lung markings were more prominent and appeared greater than at the examination in February, 1954. The appearances were suggestive of chronic pulmonary congestion, with probable associated chronic bronchitis. Lymphatic neoplastic permeation was not entirely excluded, but seemed unlikely in view of the intermittent nature of the pulmonary findings.

In November, 1954, a moderately large pleural effusion was present on the right side, with some dullness of the base of the left lung. No pulmonary deposits were definitely demonstrated. The pleura was aspirated, and the fluid was found to contain occasional groups of large cells with irregular hyperchromic nuclei, suggesting that they were carcinoma cells. Not long afterwards the patient went downhill rapidly and died.

Comment.

There is little doubt that the first opinion of the radiologist that there was carcinomatous infiltration of the lungs was correct, and that there were pleural metastases in addition. The oophorectomy and adrenalectomy were performed at an early stage of this dissemination, and the course of the disease was not altered by oophorectomy and adrenalectomy.

INFILTRATION OF THE SKELETON.

The next four cases are examples of malignant infiltration of the skeleton with metastases, but either with no soft-tissue metastases or with soft-tissue metastases occupying a lesser role. In this regard particular emphasis is placed on Case III.

Case III.

Mrs. W. was aged fifty-six years in 1951. She died forty-eight hours after adrenalectomy, and a very careful post-mortem examination was performed.

In 1951 she had been just aware of a lump in the left breast. It was two inches in diameter, with puckering of the skin, fixation to the fascia and involvement of an axillary gland. A radical excision of the breast and skin graft were performed. The growth was a spheroidal cell carcinoma.

At the end of 1953 she was bedridden with a useless right leg, the upper end of the right femur being involved in metastases with pathological fracture and with pain. In 1954 she had a pathological fracture of the right humerus. In August, 1954, she presented for adrenalectomy. She was obese, and the right leg was three and a half inches shorter than the left. Oophorectomy and adrenalectomy were performed. She died forty-eight hours after operation. She appeared to be recovering normally in the first twenty-four hours, and then she had a sudden episode of severe hypotension, from which she gradually rallied, but died soon afterwards. Post-mortem examination disclosed no other soft-tissue lesion than œdema of the lungs. There were no soft tissue metastases. The lumbar vertebral marrow contained numerous nodules of firm, white tissue, which on histological examination were found to be areas replaced by cords of tubules of large irregular epithelial cells with a few mitotic figures. Much of the marrow in the section was normal. I emphasize this skeletal involvement with sparing of the soft tissues because it throws some light on subsequent cases, particularly on Case VI (Mrs. T.).

Case IV.

Carcinoma runs true to its own particular form in an individual case. In some cases the disease has a rapid course and proceeds rapidly, and in others its course is very slow and does not seem to interfere with the well-being of the patient nearly as much as would be expected. Case IV is an example of very rapid progress with the main emphasis in the earlier stages on skeletal metastases; but the final emphasis was on both skeletal and hepatic involvement.

Miss B. was aged thirty-five years. Her sister died in February, 1954, of pulmonary metastases following radical removal of a carcinoma of the breast. Miss B., in September, 1953, underwent a radical excision of the right breast for carcinoma. In May, 1954, she complained of pain in the upper part of the neck. In June, 1954, there were areas of bone destruction in the bodies of the second and third cervical vertebræ, the appearances being characteristic of metastatic neoplasm. No metastases were seen in the dorsal segment of the spine. In July, 1954, she had severe cervical pain, and there was a kyphos at the level of the second cervical vertebra. She had sudden quadraplegia. A plaster slab over the back of the shoulders, neck and skull helped in gradual correction of the cervical displacement. Next morning the quadraplegia had disappeared. Later that month removal of both ovaries and adrenal glands was performed, her neck having been immobilized in a Minerva plaster. The relief of the cervical pain after operation was to be ascribed largely to the Minerva plaster. After a period of apparent improvement, she had developed irregular pyrexia by September, 1954, and the liver was palpable and involved in the malignant process; it rapidly enlarged to a hand's breadth. The patient had scarcely left her bed.

In October, 1954, there were extensive metastases in the cervical vertebræ, with gross destruction of the bodies of the second and third cervical vertebræ, which were collapsed into the space of one body. The arches were also destroyed and the odontoid process was almost completely gone. The spinous processes of these two vertebræ were crowded together and displaced a little posteriorly. There were probably also metastases in the body of the fourth and seventh cervical vertebræ. Definite metastases were present in the right lateral mass of the sixth cervical vertebra, in the left lateral mass and the transverse process of the seventh cervical vertebra, and in the left transverse process of the first dorsal vertebra. There were other doubtful areas. There was no sclerosis and no evidence of bone regeneration. The patient died in that month.

Comment.

In this case there was not the slightest response to adrenalectomy.

Case V.

Case V was an example of slow progress of metastatic lesions in the skeleton following slow progress of the cancer in the breast.

Mrs. F. was aged forty-one years in 1950. Before 1950 she had noticed some swelling in the breast, but in 1950 there were a diffuse swelling in the upper portion of the right breast and some thickening of the left breast. All this was thought to be part of a lobular hyperplasia. In 1952 there was a mass in the upper portion of the right breast adherent to the skin. There were no enlarged glands. In the left breast there was thickening of the upper pole. In June, 1952, an X-ray survey of the lungs and the spine revealed no changes suggestive of metastatic involvement, so a radical excision of the right breast was performed; the breast was carcinomatous. In the left breast a segmental resection of the upper pole revealed lobular hyperplasia only.

In March, 1954, the patient complained of some aching over the upper sacral region and hips.

In that month there was no evidence of metastatic involvement of the chest. In the dorsal and lumbo-sacral parts of the spine there were irregular areas of rarefaction scattered throughout the neural arches and facets of the second and third lumbar vertebræ, most suggestive of metastatic involvement in these regions. Doubtful changes were seen in the vertebral bodies at this level, which may have been due to the same cause. There was no alteration of the intervertebral joint spaces, nor was there any demonstrable collapse of the vertebral bodies. Irregularity of density in the left ilium favoured neoplastic change.

In April, 1954, both ovaries and adrenals were removed. In June, 1954, she was free of pain except on sudden forward bending.

In August, 1954, a radiological survey showed that there had been a slight increase in the mottled rarefaction previously reported in the bodies and neural arches of the second and third lumbar vertebræ. In addition, some similar changes appeared to be present in the body of the third lumbar vertebra, but there was no evidence of vertebral collapse. The area of absorption in the ilium near the left sacro-iliac joint appeared slightly smaller, and there was evidence of bone sclerosis at the margins. Mottled rarefaction was present in the body of the third thoracic vertebra, and this appeared unaltered since the examination of June, 1954.

In November, 1954, the third thoracic vertebra remained unchanged. Irregular mottling and rarefaction were present in the bodies of several lower thoracic vertebræ. In the lumbar part of the spine the sclerosis had increased slightly, and in the ilium there was no appreciable change.

At this stage the patient had resumed tennis and felt well.

In April, 1955, she was free of pain, worked hard and stood it well. She had lost weight (one and a half stone) until three months before, but the loss of weight then ceased. She looked thinner, and her flesh was less firm. She had a sallow appearance. Her liver was enlarged three fingers' breadth and felt firm but smooth. A radiological survey showed that further repair had taken place in the medial portion of both wings of the ilium, but there were extensive areas of bone destruction laterally in each ilium, particularly in the right. Throughout the dorso-lumbar part of the spine there did not appear to have been any definite increase in bone destruction, although the changes in the neural arch of the first lumbar vertebra were somewhat suspicious. Elsewhere increased calcification was evident. There was no definite increase in bone destruction in the dorsal part of the spine.

Comment.

In retrospect, in this case removal of the ovaries and adrenals performed just over a year earlier did not seem to have made any appreciable difference, if any, to the course of the disease, apart from the fact that the patient had no pain. This is an example of slowly progressing skeletal involvement in metastases, with the possibility that the liver is now involved. It is likely that at least five years have elapsed since the development of the carcinoma of the breast.

Case VI.

Case VI is an example of extremely slow progress of skeletal metastases, the time elapsing from the development of the carcinoma till the present time being at least nine years.

In 1946, Mrs. T., aged thirty-seven years, noticed a lump in the right breast, and in 1949 she noticed that the skin was indrawn over the lump, and in 1950 that an ulcer was developing, which spread to two inches in diameter. In 1952 she had treatment for the first time, six years after the appearance of the lump. She was given radiotherapy and testosterone (100 milligrammes three times a week), and in 1953 an implant of testosterone was made. In January, 1953, there was an area of considerable rarefaction immediately above the left acetabulum, about an inch and a half in diameter. A further radiological survey was made in April, 1953. In the pelvis there was much increased rarefaction above the left acetabulum, and a further change, partly rarefaction, partly sclerosis, in the left ilium near the posterior superior iliac spine. There was also some rarefaction at the junction of the neck and shaft of the left femur. The intervertebral disk space between the eleventh and twelfth dorsal vertebræ was narrowed anteriorly, with some osteosclerosis in the twelfth dorsal vertebra. In July, 1953, it was noted in the pelvis that there was increasing sclerosis about the left acetabulum and in the upper portion of the wing of the left ilium. Changes were also appearing in the upper portion of the wing of the right ilium. The changes in the body of the twelfth dorsal vertebra were more pronounced, there being more rarefaction and more sclerosis with some loss in the height in the left side of the body. In December, 1953, examination of the lesions in the pelvis showed increasing sclerosis and increasing spread; the appearances were the same in those in the head and neck of the left femur. In the twelfth dorsal vertebra there was more pronounced change with some collapse, and there were early changes in the body of the third lumbar vertebra.

In 1954 it is recorded that a spinal brace was fitted because of several attacks of back pain, but now the patient denies that she had pain. Masculinization was pronounced, and a shrunken scar replaced the right breast. In April, 1954, it was considered that there was some malignant infiltration of both lungs.

In July, 1954, bilateral oophorectomy and adrenalectomy was performed, and at operation it was noticed that there was a small pleural effusion.

In September, 1954, sclerotic lesions were widespread in both ala of the pelvis, in the head and neck of the right femur, and extensively in the head, neck and the junction of the neck and shaft of the left femur. The lesion above the left acetabulum was very dense and had spread, with mottled rarefaction and sclerosis, into the body and part of the inferior ramus of the left ischium. There was also involvement of the sacrum and of the fifth lumbar vertebra and its transverse processes. The sclerosis was particularly pronounced. In the same month (September, 1954) examination of the spine revealed increased spread throughout the lower dorsal vertebræ, increased collapse and sclerosis of the twelfth dorsal vertebra, and changes in the first, second and third lumbar vertebræ, and perhaps the fourth lumbar vertebra as well. Some changes were also beginning to appear in the neural arches in the fourth and fifth lumbar vertebræ. Both in the middle and the lower dorsal vertebræ there was a great increase in the involvement, with mottled rarefaction and sclerosis.

In January, 1955, these changes were all pronounced, and perhaps more advanced both in the pelvis and in the dorsal and lumbar parts of the spine.

An X-ray survey was made in April, 1955, and the report was as follows:

> There is fairly dense sclerosis in the region of the left ileal metastasis and over quite a large adjacent area. Several other sclerotic areas in the pelvis, upper femora, lumbar vertebræ and dorsal vertebræ.
>
> These areas vary somewhat in density and homogeneity, some being mottled, and some showing a good deal of osteoporosis. The least dense affected site is the body of the eighth dorsal vertebra. The twelfth dorsal vertebral body is dense and a good deal collapsed. All these abnormal areas are regarded as being metastases with varying degrees of bone regeneration and sclerosis.

The collapse of the twelfth dorsal vertebra was very pronounced, with some osteophytic projection of the edges; the first lumbar vertebra was extensively involved, there was a spot of involvement in the second lumbar vertebra, more than three-quarters of the body of the third lumbar vertebra was involved in rarefaction and sclerosis, and the involvement of the mid-dorsal and lower dorsal vertebræ was extensive. In the pelvis and neck of the femur and in the body and inferior ramus of the ischium the sclerosis was very considerable. The sacrum was involved, and the involvement of the body of the fifth lumbar vertebra and its transverse processes was widespread.

Comment.

Sclerosis does not imply healing. It is a characteristic of the life history of the skeletal metastases in some patients, the bones becoming heavier and denser, just as rarefaction is a characteristic in other patients (as in Case IV).

In reviewing Case VI, the surprising feature is that the patient lives so little affected by the steady spread of the disease in the skeleton. She has no pain, and the brace is replaced by a surgical corset. She looks well, there is no cachexia, and masculinization has almost disappeared. But with the relentless progress of the disease as described it is difficult to avoid the conclusion that adrenalectomy has failed to alter the course. Her increased well-being may be due to the abolition of masculinization.

SUMMARY.

Removal of the adrenals and ovaries in six cases of metastases of breast cancer has not had any apparent effect on the course of the particular life history of the disease of each patient.

ACKNOWLEDGEMENTS.

Acknowledgement is made of the help given by the Royal Melbourne Hospital and the Peter Macallum Clinic, of the care given to these patients by Dr. Pincus Taft as endocrinologist and by Dr. E. B. Drevermann in fluid replacement, and of the help of those anæsthetists whose worst fears were usually happily groundless.

INJURY TO THE LIVER WITH INTRAPERITONEAL HÆMORRHAGE IN THE NEWBORN.

By FELIX ARDEN, J. C. DIQUE AND DORICE WRENCH,
From the Women's Hospital, Brisbane.

THIS paper records the clinical histories of three babies under our care during 1954 who sustained massive intraperitoneal hæmorrhage secondary to hepatic injury at birth.

Routine post-mortem examination has shown that it is not particularly uncommon for babies to die from this cause. Potter reported 24 instances among 2000 unselected autopsies on newborn and stillborn infants (Potter, 1940), and Rogers quotes Adair's 10 cases of hæmoperitoneum from torn subcapsular hæmatoma in 1046 autopsies (Rogers, 1934). Both series indicate that about 1% of neonatal deaths arise in this way, and it is generally conceded that, after intracranial lesions, hepatic injury is the next commonest cause of fatal trauma in the newborn. Even so, there is very little literature on the subject, and text-books of obstetrics and pædiatrics give it scant attention. The diagnosis is rarely made before death, because intraperitoneal hæmorrhage is still regarded—if it is considered at all—as a post-mortem spectacle and not as a dramatic event in the maternity hospital nursery.

Yet the significant fact is that some of these babies can be saved. Credit for first bringing this point to the notice of the medical profession must go to Rogers, who in 1933 reported four cases, in one of which the diagnosis was made during life (Rogers, 1933). Although this baby subsequently died, Rogers made reference in his paper, from notes supplied by W. H. Rubovitch, to another infant in whose case the condition was recognized early and surgical treatment was successful. This is the first reference in the literature to survival.

Rogers wrote: "One cannot over-emphasize the fact that the condition can be diagnosed and that early diagnosis is imperative if . . . treatment is to be of any avail." However, his paper attracted little notice, perhaps because the care of the newborn baby a generation ago was left to the nursing staff, and it was not until thirteen years later that the next recovery was reported (Arden, 1946). Subsequently five other babies with intraperitoneal hæmorrhage were examined in Brisbane, and the whole series of six cases with four survivals was reported (Arden, 1951). In this paper a plea, similar to that of Rogers, for early diagnosis and immediate treatment was made, and it is at the risk of repetition that the present article has been written. We have written it because it is certain that if the condition was more generally recognized, more lives would be saved.

The fact that only one of the present series of three babies survived underlies the importance of speed in proceeding with blood transfusion once the diagnosis has been made. Such infants generally look well and behave normally for about forty-eight hours or even longer after birth. During this period they have intact subcapsular hæmatomata of the livers, slowly expanding. Suddenly the hæmatoma ruptures, flooding the peritoneal cavity. At once the peritoneal shock and accelerated blood loss swiftly reduce the baby to a pale, pulseless creature, moaning feebly in the cot. Within an hour or even less he will be dead. This point is borne out in the following case histories.

Case I.

Baby A., a female, weighing ten pounds nine ounces, was born at the Brisbane Women's Hospital at 11 a.m. on April 20, 1954, one week after the estimated date of confinement. Despite the baby's large size the mother delivered this, her eighth child, easily and rapidly, within four and a half hours from the onset of labour. Presentation was by the vertex. No instruments were used, and resuscitation was not required. No abnormality was noticed until 9 a.m. on April 23, when the child was taken to the mother and found to be unable to suck, although she had managed a satisfactory breast feed three hours earlier. A nurse, summoned to the bedside, was alarmed to see how pale and collapsed the baby had suddenly become.

Medical examination a few minutes later revealed the infant to be shocked, white and pulseless. Her heart beat was uncountable, her breathing was irregular and rather deep, her movements were feeble, and she was emitting a moaning cry at frequent intervals. The fontanelle tension was normal. Three small bruises were noticed on her body, one near the left nipple and two on the limbs. Her abdomen was slightly distended and dull to percussion in both flanks. On rolling the baby from side to side shifting dullness could be demonstrated. As the abdominal muscles were somewhat tense, the edge of the liver could not be clearly defined. The association of symptoms of shock with evidence of free fluid in the abdomen pointed clearly to intraperitoneal hæmorrhage.

Oxygen and 10 milligrammes of "Synkavite" were administered, and with the child literally dying before one's eyes a hasty blood transfusion was given. Group O Rh-negative blood was taken from the hospital bank without waiting for cross-matching. Even so, the twenty minutes that elapsed before the donor blood entered the vein was almost too long. There had been no bleeding from the incision at the ankle, and after a while the infant ceased to moan or even move. As the transfusion proceeded the colour returned, and eventually the radial pulse could be felt.

The transfusion was stopped after 225 millilitres had been administered, as the general appearance of the child was then fairly satisfactory and there was no accurate means of assessing the amount of blood lost. A cannula was left in the vein and a slow drip administration of saline was continued to maintain its potency. Three hours later, because of a deterioration in the baby's general condition, blood transfusion was recommenced and continued at the rate of 50 millilitres per hour until a further 275 millilitres had been given.

Within eight hours of her initial collapse the baby's condition was excellent, her colour pink and her pulse fairly strong. She lay quietly in the cot, apparently asleep. The only evidence of trouble lay in her greatly distended abdomen, 16·5 inches in girth at the umbilicus. Shifting dullness was by this time easily demonstrable. The abdominal wall was considerably stretched and the muscles were firm.

Further treatment was limited to a second injection of 10 milligrammes of "Synkavite", and because of the risk of introduced infection, 30,000 units of penicillin were given every three hours for the next three days. A slow intravenous drip administration of saline and glucose was maintained until the following morning, by which time it was evident from the baby's colour and pulse rate that no further bleeding was taking place. Her bowels acted twice over this period, the motions containing a considerable quantity of mucus, but no blood. On the day after the accident her abdomen was still tense and the girth still 16·5 inches at the umbilicus. To confirm the belief that the peritoneal effusion was indeed blood, a serum needle was introduced into the left flank. Dark blood dripped steadily, and 20 millilitres were collected in a few minutes. The infant's subsequent recovery was steady and uneventful. There was no evidence of any further bleeding, no rise in temperature and apparently no symptoms attributable to the large amount of free blood remaining in the peritoneal cavity. Small feedings were started on the second day, and the child was returned to the breast two days later. The hæmoglobin level was 21 grammes per 100 millilitres on the ninth day. The abdominal distension subsided slowly, the girth falling to 15 inches on the ninth day and 14 inches on the fourteenth day. When she was examined at the out-patient department at the age of six weeks, the baby was in splendid condition and doing well. No abnormality could be discovered, and there had been no after-effects or complications from the intraperitoneal hæmorrhage.

Case II.

Baby B., a male, weighing eight pounds twelve ounces, was born at 9 a.m. on July 26, 1954, two weeks after the expected date of confinement. Labour was not prolonged, and the child was delivered by the vertex in good condition, no forceps being applied. There was some difficulty in releasing the shoulders. Ten milligrammes of "Synkavite" were administered as a precautionary measure. The baby remained well until 8 a.m. on July 30, when he was found to have become collapsed, pale and pulseless. A tentative diagnosis of intraperitoneal hæmorrhage was made, but the child deteriorated very rapidly and died before blood transfusion could be given. After death twenty millilitres of blood were withdrawn from the peritoneal cavity by needle puncture in the right flank.

At autopsy the peritoneal cavity was found to contain approximately 250 millilitres of blood and blood clot. A small tear, about 2·0 centimetres long and 0·3 centimetre deep, was found on the inferior surface of the right lobe of the liver, and this appeared to be the origin of a subcapsular hæmorrhage which had lifted the capsule off about half the inferior surface of the right lobe and extended on to the upper surface. The capsule had been torn, allowing blood to reach the peritoneal cavity. There was also a separate circumscribed subcapsular hæmorrhage about 2·0 centimetres in diameter on the upper surface of the right lobe. No other abnormalities were discovered.

Case III.

Baby C., a female, weighing six pounds twelve ounces, was born on September 15, 1954, three weeks before the expected date of confinement. She was the second child of an epileptic mother, but the pregnancy was uncomplicated. A normal labour, ending in an easy vertex delivery, lasted fourteen hours. The baby appeared perfectly well at birth, and showed no signs of distress until she was thirty-one hours old, when she was discovered by a nurse to have become pale, slightly cyanotic and extremely collapsed. She had seemed to be quite well a short time previously. No external bleeding had been observed. An unfortunate delay followed, during which time was wasted in an attempt to take blood from a bloodless extremity for hæmoglobin estimation, and it was not until an hour and a half later that blood transfusion was commenced. It is probable that the child was already dead at this stage. No heart beat could be heard, and there were no respiratory movements and no response to the injected blood.

At the post-mortem examination the body showed extreme pallor with some distension of the abdomen. There was also some œdema of the legs and of the abdominal wall. The peritoneal cavity was completely filled with free blood and blood clot. There was a large hæmatoma on the superior surface of the liver, extending around the lateral margin to the inferior surface, lifting up the capsule. Also on the inferior surface there was a linear tear in the liver substance about two centimetres in length, from which blood was oozing.

Comment.

Steih and Wright (1953), in a recent paper on abdominal injuries in the newborn, described 15 cases of rupture of the liver and 10 of rupture of the gastro-intestinal tract. There was no instance in their hospital records of internal hæmorrhage associated with rupture of the spleen, kidney or suprarenals. Eight of their 15 patients with liver injury were in poor condition at birth and died in the first few hours. The remaining seven showed a clinical picture similar to our patients, and after a period of apparent good health varying from twenty-four to seventy-eight hours had sudden symptoms of distress. All of them died.

We are still uncertain of the reason for the massive hæmorrhage in this condition, as there is usually more bleeding than one would expect from the relatively trifling liver injury revealed at autopsy. It is possible that an hæmorrhagic tendency, associated with a low prothrombin level in the newborn, plays at least some part. The latent interval before the appearance of symptoms, which varied from thirty-six to 104 hours after birth for the six cases previously reported and from thirty-one to ninety-five hours in the present series, is not much longer than the usual interval before the appearance of symptoms of hæmorrhagic disease of the newborn. Further, in one of the cases here described and in two of the six earlier cases, spontaneous bruises were present, which may have indicated a bleeding tendency. The cessation of bleeding after blood transfusion might also have been due, in part at least, to the addition of prothrombin to the infant's circulation. On the other hand, post-maturity and the disproportionate size of the babies may be an important causal factor. It cannot be wholly a coincidence that in our nine reported cases the babies have had an average weight of over nine pounds and that all but two have been post-mature. Exactly how the liver comes to be damaged remains a mystery; it may be by compression of the trunk in the birth canal, by some manipulation on the part of the *accoucheur*, or by too energetic slapping to encourage breathing. There is always the possibility that some particular obstetrical manœuvre or method of resuscitation may be at fault, which artificially produces the condition in some hospitals and not in others.

In surviving patients who have been treated conservatively there can be no certainty that hepatic injury has been responsible for the intraperitoneal hæmorrhage, but there is good reason for believing so. Potter, who describes the condition clearly (Potter, 1952), states that the liver is the principal abdominal organ subject to injury, and that it may be traumatized simply by being grasped too firmly during delivery. Also, liver damage and subcapsular hæmatoma were found in every one of the six babies in this and the earlier series whose abdomen was opened either at operation or after death.

A question of particular interest in the management of these babies is whether, after the blood volume has been restored by transfusion, anything is to be gained by laparotomy. In the light of our experience with babies who have recovered under conservative treatment, we are inclined to think that operation is unnecessary. The whole surface of the liver is not accessible to the surgeon, and indeed it is not always easy to locate a small fissure even at a post-mortem examination. In any event, the liver of a newborn baby does not suture well, and its capsule which contained the hæmatoma is likely to be too thin and too stretched for satisfactory repair. On the other hand, if the abdomen is left intact the bleeding eventually ceases, and meanwhile it is not difficult to administer blood to the baby in sufficient quantities to keep its colour pink and its pulse of good volume. One may feel confident that blood will stop oozing from the liver as the clotting capacity improves and the intraabdominal pressure rises. Estimation of the amount of blood needed has to be made by observation of the child's colour and general appearance. The loss is obviously incapable of accurate measurement, and hæmoglobin readings are of no value in such a rapidly changing situation.

Surprising as it may seem, blood in the peritoneal cavity distresses these infants very little. The fact that they are not suffering from any constitutional illness and that their lives can be saved by transfusion alone makes it important to keep the condition in mind, especially as stored group O Rh-negative blood is now readily available.

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Reviews.

Psychoanalysis: Practical and Research Aspects, The Abraham Flexner Lectures, Series Number Twelve. By Willi Hoffer, M.D. (Vienna), Ph.D. (Vienna), L.R.C.P., L.R.C.S. (Edinburgh), L.R.F.P.S. (Glasgow); 1955. Baltimore: Published for Vanderbilt University by The Williams and Wilkins Company. Sydney: Angus and Robertson, Limited. 8″ × 5¼″, pp. 112. Price: 37s. 9d.

THIS book, by Willi Hoffer, who is editor of the *International Journal of Psycho-Analysis* (London), consists of six chapters corresponding with lectures given to a general medical audience when he held a visiting lectureship at Vanderbilt University (United States of America).

Following an introductory chapter, he writes a practical account concerning principles of training in psychoanalysis. In the third chapter he ably illustrates from his case histories the subject of internal conflict and anxiety. Next he discusses the prolonged study of a comparatively normal girl, aged two a half years, who had an operation for umbilical hernia under exceptionally good conditions, but who nevertheless suffered from profound psychological disturbances. The fifth chapter describes psychoanalytical findings in a young woman suffering from post-encephalitic parkinsonism, thus throwing detailed light on what could be called a psychosomatic case. In the final chapter the author discusses his own contribution to the theory of mental development concerning interaction between hand and mouth during babyhood.

Extensive references and a good index add to the value of the book which contains information for any who wish to know how psychoanalysis differs from general psychiatry, as well as for the practising psychoanalyst.

Atlas of Tumor Pathology (Washington: Armed Forces Institute of Pathology). Section II—Fascicle 5: Tumors of the Soft Tissues", by Arthur Purdy Stout, M.D.; 1953. 10½″ × 8″, pp. 138, with 78 illustrations. Price: $2.00. Section IV—Fascicle 11: "Tumors of the Major Salivary Glands", by Frank W. Foote, junior, M.D., and Edgar L. Frazell, M.D.; 1954. 10½″ × 8″, pp. 150, with 184 illustrations. Price: $1.50. Section VI—Fascicle 21: "Tumors of the Stomach", by Arthur Purdy Stout, M.D.; 1953. 10½″ × 8″, pp. 104, with 66 illustrations. Price: $1.75. Section VI—Fascicles 23 and 24: "Tumors of the Retroperitoneum, Mesentery and Peritoneum", by Lauren V. Ackerman, M.D.; 1954. 10½″ × 8″, pp. 136, with 105 illustrations. Price: $1.50.

IN this journal numbers of fascicles of "An Atlas of Tumour Pathology" have already been reviewed. This atlas is being published by the Armed Forces Institute of Pathology (United States of America) under the auspices of the Subcommittee on Oncology of the Committee on Pathology of the National Research Council in the United States. Five more fascicles have now appeared.

Fascicle 5, Section II, deals with tumours of the soft tissues. It is the work of Arthur Purdy Stout, Professor of Pathology at the Columbia University College of Physicians and Surgeons. In this fascicle the term "soft tissues" is taken to exclude all the organs, epithelial-lined tubes, the epithelial structures of the skin, the bone marrow, and the lymph nodes. All tumours in the soft tissue so defined arise from mesodermal or neurectodermal sources. Tumours arising from these sources are frequently mixed and aberrant, so that their recognition and classification can be difficult. Moreover, tumours of nerve tissue and of bone invade or develop secondarily in soft tissue, further confusing the picture. Among the benign tumours are illustrated and described the fibromatoses, myxomatoses, xanthomatoses, lipomatoses, and the benign tumours of muscle and vascular tissue. Of the malignant tumours, fibrosarcoma, myxoma, liposarcoma, the muscle and vascular tumours, and an assortment of others are dealt with. Professor Stout emphasizes the difficulty of early diagnosis and treatment of the deeper malignant tumours of the soft tissues.

Fascicle 11, Section IV, deals with tumours of the major salivary glands. Its authors are Frank W. Foote, pathologist, and Edgar L. Frazell, associate surgeon, of the Memorial Center for Cancer and Allied Diseases, New York. Their work is based on the study of nearly 900 cases seen over a twenty-year period. The series includes only one possible sebaceous adenoma, and no primary malignant lymphomata. The usual range of tumours is dealt with.

In Fascicle 21, Section VI, Professor Stout describes tumours of the stomach, and explains that although carcinoma is overwhelmingly the most frequent tumour in that situation, the relatively few other types of growth can be so important that a large and detailed section covering them is justified. He then enumerates and illustrates a series of 651 tumours, classified according to their tissues of origin.

Fascicles 23 and 24, Section VI, are by Lauren V. Ackerman, Professor of Pathology and Surgical Pathology at the Washington University School of Medicine. Professor Ackerman discusses tumours of the retroperitoneum, mesentery and peritoneum. This rather arbitrary regional division results in the inclusion of a wide range of tumours of the retroperitoneum; the presentation of the individual descriptions is classified into tumours of mesodermal, neurogenous, renal blastema, embryonic and metastatic origin. Tumours of the mesentery and omentum also present complications, due to the large number of metastatic growths that can occur.

This atlas is excellently produced, and must be of great value to morbid anatomists. Apart from the illustrations, which are well selected and reproduced, the accompanying general discussions are in fact first-class short monographs.

The Technique of Psycho-Analysis. By Edward Glover, M.D.; 1955. London: Baillière, Tindall and Cox. 10″ × 6½″, pp. 414. Price: 35s.

THIS book is a felicitous combination of detailed information with useful rules in the conduct of treatment by psychoanalysis.

At the end of the book are reprinted the answers by a large number of psychoanalysts to a *questionnaire* concerning their own methods, and three republished articles by Glover dealing with special aspects of the subject, one of which is particularly valuable because it summarizes the underlying principles of treatment.

It could be said that the essence of psychoanalytical treatment of an adult consists in the patient's reliving the experiences of his childhood in such a way that over-intensified adaptations which originated during that developmental period of life are reduced in degree to a more or less average level. If a patient suffers from psychotic symptoms these may be regarded, beside the constitutional disposition, as mainly due to current distortions of adaptive mechanisms which had been intensified beyond the average range during babyhood; and if he suffers from psychoneurotic symptoms these largely result from over-intensified adaptations dating from later childhood. It is important to note that in psychotic and psychoneurotic symptoms those that are inhibitory in effect result from over-intensification of what might be called negative adaptive mechanisms.

Because less is known about the adaptive mechanisms of babyhood, it follows that psychoanalytical treatment today is largely recommended for those patients whose over-intensified adaptations commenced in later childhood, such as hysterics, obsessionals, and people seeking lasting relief from comparatively moderate emotional difficulties such as inhibitions in work, social life, and love.

Incidentally, the printing and binding make this book a joy to handle.

Man in a Cold Environment: Physiological and Pathological Effects of Exposure to Low Temperatures. By Alan C. Burton, Ph.D., and Otto G. Edholm, M.B., B.S.; 1955. London: Edward Arnold (Publishers), Limited. 8½″ × 6″, pp. 288, with 75 illustrations. Price: 30s.

THAT Canada with her rigorous winter should present opportunities for investigating the action of low temperatures on the human body is obvious; in addition there are economic problems facing that country which demand solution; areas which formerly were uninhabited, chiefly through severity of the climate, are now being commercially exploited, largely on account of mineral wealth. Professor Alan C. Burton, of the University of Western Ontario, and Dr. Otto G. Edholm, of the National Institute for Medical Research, England, but formerly professor of physiology in the University of Western Ontario, have collaborated in producing this book under the auspices of the Physiological Society of Britain entitled "Man in a Cold Environment". In addition to the special needs of Canadian immigration and industrial expansion, there have arisen problems presented in all lands by the increasing use of hypothermia in cardiac surgery. When body temperature is lowered to 78° F., the heart rate may be only 15 to 20 beats a minute and the oxygen consumption falls to 20% to 25% of the normal resting value. The authors rightly insist that hypothermia is dangerous, though admitting that some surgical procedures cannot be carried out in its absence. They might

have mentioned that, though the human body in conscious health tolerates a rise in temperature, as in vigorous exercise, anything which threatens a lowering is resented; a riot can be quelled more quickly by hosing with cold water than by police batons.

A reading of this scholarly book shows how small the research has been on the problems of a cold environment which can be called scientific. Casual observations without controls, estimations of basal metabolism by untrained workers and purely clinical approaches to what should be physiological inquiries conducted by highly trained investigators are all too evident. There is scarcely one well-attested conclusion—for instance, the increased appetite for fat—which has not been queried or denied by some writer on the subject.

The authors have done a useful service in drawing attention to the fact that in man and other homoiothermal animals the body can be divided into a core where the temperature alters little and a shell which shows considerable variations according to the conditions of the environment and the position of each constituent of the shell. They mention that the melting point (it would be better to select the solidifying point, for the two are not identical) of caribou fat progressively declines the farther down the leg it is taken—this is, of course the reason why neat's foot oil is so popular as a leather dressing. Just how the glyceryl esters are chosen to suit each body site is a problem which has not received the attention it deserves. The ingenious suggestion is made that one of the methods of bringing about acclimatization to cold is an improvement in the distribution of adipose substances with their varying temperatures of solidification. A few criticisms may be offered. The important work of C. J. Martin in Australia showing that the platypus possesses an imperfectly developed homoiothermal adaptation should have been mentioned and its importance stressed. That the naked Australian aboriginal can fall asleep before a fire on a cold night is mentioned, and the suggestion is made that the loss of heat at the back is compensated for by the gain from the fire in front; but Baldwin Spencer has given us a picture of aborigines sleeping naked until their small fire died out and actually showing hoar frost on the small hairs of their bodies. When the rising sun shone on them, they "thawed", to use Spencer's word, and resumed normality. It is possible that there may be degrees of homoiothermal adaptation in different races. Another criticism is that laboratory experiments are of dubious value in assessing the action of climate on man. The voluntary and involuntary responses of the body on exposure to cold are well presented; also the physical qualities of clothing. Very useful is the list of gaps in our knowledge which need filling up by expert hands.

Primary Anatomy. By H. A. Cates, M.B., and J. V. Basmajian, M.D.; Third Edition; 1955. Baltimore: The Williams and Wilkins Company. Sydney: Angus and Robertson, Limited. 10″ x 7″, pp. 358, with 443 illustrations. Price: 62s.

THIS book is written for nurses, physiotherapists, occupational therapists, health and physical educationists. It would be very suitable also for medical students as an introduction to the study of anatomy. Numerous line drawings are provided to illustrate the text.

The guiding principle in the book has been to make it, not only interesting reading, but also more useful for the understanding, studying and reviewing of anatomy. This work comes from the late Professor of Anatomy and the Associate Professor of Anatomy in the Toronto Medical School. It has run to a third edition, and, though Professor Cates became seriously ill, he continued with plans for the edition under review until his death in 1953. It was felt that the book would serve as a lasting memorial to him.

The work consists of an introduction and 11 chapters, each chapter dealing with a separate system. It is considered that a systematic approach involves the beginner in fewer difficulties than does a regional one, and that discrimination must be exercised both as to the amount of detailed instruction given for each system and as to the amount of embryological instruction to be given. It is considered that access to anatomical material is highly desirable, if not absolutely essential. The authors consider that it is for these reasons that the skeletal, articular, muscular and circulatory systems have been treated in greater detail than the digestive, urinary and generative systems.

Because of the paramount importance of the nervous system in regulating the activities of all others, it has been treated in greater detail than was at first thought to be necessary.

Spermatogenesis, oogenesis and the early development of the fertilized ovum have been omitted, since they would seem to have little place in an elementary course. Even organogenesis, a much more useful study, is referred to only for an explanation of conditions found in the adult body—for example, the human derivatives of the branchial arches and their disposition are quickly appreciated by even the beginner if something is known of the respiratory method in fishes.

The introductory chapter is a very useful one, as it contains information that is vital to the student as an introduction to anatomy. Throughout the book, care has been taken to deal with each subject from both structural and functional points of view, so that the subject is made to appear as it should—a living subject.

Stammer is not Nerves (Stammering and its Cure). By H. V. Hemery, L.R.A.M.; 1955. London: The School for Functional Speech Disability. 9″ x 6″, pp. 82, with nine text figures. Price:

In "Stammer is not Nerves", by Mr. H. V. Hemery, L.R.A.M., published by the School for Functional Speech Disability, London, 1955, the author insists that all stammering results from "basic-error" or the misuse of the motor mechanism involved in the production of speech. He postulates that there is no other cause, that since there is no psychological involvement, psychiatric or psychological investigation is valueless and unnecessary. He claims that: "The job of teaching the pupil the art of proper speech is the realm of the voice-expert, who can prove his own art by his own speech skill. The technique of speech correction is an art and not a medical problem."

Mr. Hemery's negation of the value of relaxation suggests a confused concept of relaxation, since it would be impossible to develop a beautifully coordinated system of motor skills for speech facility without a fundamental basis of relaxation.

Some stammerers do exhibit poor motor control of their speech organs with at times concomitant dyslalia of varying degrees, but not all stammerers fall into this category; many speak æsthetically and with normal facility during their non-stammering periods.

Mr. Hemery may possess the rare personality which, irrespective of method, renders him successful in the treatment of this condition, but the validity of his theories and of the Hemery method of treatment is doubtful.

Outlines of Enzyme Chemistry. By J. B. Neilands and Paul K. Stumpf, with a chapter on the Synthesis of Enzymes by Roger Y. Stanier; 1955. New York: John Wiley and Sons, Incorporated. London: Chapman and Hall, Limited. 9¼″ x 6″, pp. 326, with about 70 illustrations. Price: $6.50.

THERE is room for a text-book on enzyme chemistry which gives a good account of present knowledge, more than is given in text-books of biochemistry but much less than is contained in the large manuals on the subject. "Outlines of Enzyme Chemistry", by J. B. Neilands and P. K. Stumpf, is an attempt to supply such a need. The book is said to be written for beginners and non-specialists in the field. The beginners are evidently expected to have quite a considerable knowledge of physical chemistry. Over half of the book has been devoted to the general properties of enzymes. Some aspects are dealt with in excessive detail far beyond what the beginning student or general reader would require, while other explanations are so condensed as to be very difficult to follow. The rest of the book deals with types of coenzymes and enzymes and metabolic patterns. In this last section glycolysis, hexose monophosphate shunt and tricarboxylic acid cycle are dealt with in very great detail, and oxidative phosphorylation and fatty acid oxidation in less detail. Other types of enzyme action are passed over very lightly or not mentioned at all.

There is much that is good in the book, but it is ill-balanced and in places too detailed and too difficult for the students for whom it is intended. It could be a useful book for reference in the library of a biochemical department, but cannot be recommended for students or the general reader.

The Management of Acute Poliomyelitis. By C. P. Stott, S.R.N., C.M.B. (Part I), and M. Fischer-Williams, M.R.C.P. (Ed.), with a foreword by W. Ritchie Russell, C.B.E., M.D., F.R.C.P. (Ed.), F.R.C.P. (London); 1955. Edinburgh and London: E. and S. Livingstone, Limited. 8½″ x 5½″, pp. 112, with 43 illustrations. Price: 12s. 6d.

THIS little book of 96 pages is primarily intended for the nurse in charge of patients in the acute stage of poliomyelitis, but any medical practitioner, likely to have to

manage such a patient, should know its contents thoroughly. There is not an unnecessary word, the illustrations are clear and the line drawings are most instructive. There are brief summaries on the nature and clinical picture of the disease, the physiology of respiration, isolation technique, necessary equipment and types of respirators, but the most important chapters are on danger signs to be looked for and methods to be used by nurses. The authors advise avoidance of restrictive appliances and rely on careful handling, posturing, hot packs, hot baths and passive movements to relieve and prevent muscle pain, tenderness and contractures with resultant deformity. Once the stage of sensitivity is passed, usually three weeks, active movements are begun. Two appendices describe passive and active exercises which can be carried out by a nurse in the absence of a physiotherapist. The chapters on respiratory insufficiency are excellent and its signs are emphasized. The way postural drainage and aspiration can remove secretions in pharyngeal paralysis are clearly shown with tracheotomy reserved where these methods fail. Nursing care in the respirator is of great importance, and in this respect the book is outstanding. In the "split-front" and "alligator" types, nursing is obviously much easier, especially with regard to changes of posture and drainage of the respiratory passages and pharynx. The important and difficult step of weaning from the respirator occupies an excellent chapter. An appendix giving the personal experiences of a respirator patient shows how important small details may be for comfort. A description of management with positive pressure artificial respiration makes one wish the method was more used in this country. All in all, this is an excellent little book and provides much essential information for all those interested in restoring these unfortunate patients to as normal a state as possible.

Peripheral Vascular Diseases. By Edgar V. Allen, B.S., M.A., M.D., M.S. in Medicine, F.A.C.P., Nelson W. Barker, B.A., M.D., M.S. in Medicine, F.A.C.P., and Edgar A. Hines, junior, B.S., M.A., M.D., M.S. in Medicine, F.A.C.P., with associates in the Mayo Clinic and Mayo Foundation; Second Edition; 1955. Philadelphia: W. B. Saunders Company. Melbourne: W. Ramsay (Surgical), Limited. 9¼" × 6¼", pp. 838, with 316 illustrations, seven in colour. Price: £6 3s. 6d.

THE second edition of this book has been carefully revised, and new subject matter has been introduced—for example, aortography, purpura and coarctation of the aorta. Increase in size of the book has been avoided by deletion of a long chapter on special methods of study.

This work is more than a treatise on diseases of the peripheral arteries, as it includes comprehensive accounts of all the diseases of the arteries (with the exception of hypertensive disease and vascular diseases of the nervous system), as well as those of the veins and lymphatic vessels.

Twenty-five years of experience at the Mayo Clinic goes into this book, and the authors have been assisted by 13 of their colleagues, including several specialist surgeons.

Many of the chapters are in the nature of valuable monographs—for example, Chapter XII on *thromboangiitis obliterans*. Less common conditions involving the peripheral vessels receive full attention, notably scleroderma, the *scalenus anticus* syndrome, and *periarteritis nodosa*. The chapter on surgical treatment contains 123 pages. Extensive references are listed at the end of each article, and there are numerous good photographs and illustrations. Each section maintains a uniformly high standard and practical outlook.

It is encouraging to learn that the authors are satisfied that a careful clinical examination by an experienced physician is nearly always adequate for diagnosis. Special investigations are important for difficult cases and sometimes for confirmation. This is a first-class book and is highly recommended.

Any Wife or Any Husband: A Book for Couples Who Have Met Sexual Difficulties and for Doctors. By Medica (Dr. Joan Graham); Second Edition; 1955. London: William Heinemann (Medical Books), Limited. 8¼" × 5¼", pp. 147. Price: 10s.

THIS is a very sound exposition of the causes and cures for marital difficulties, but whether it could be recommended indiscriminately to all married couples is open to doubt. While it deals competently, fully and unoffensively with the practical and physical difficulties which lead to incompatibility, it also covers very thoroughly all the psychological aspects underlying mental and physical incompatibility in a manner that probably calls for a sound grounding in the elements of psychology. It is possible that, although its psychology is sound, or alternatively quite plausible when it ventures into the hypothetical, it might confuse those who have the half-baked concepts of psychology so common these days. Nevertheless, any physician who meets marital problems in his practice could use this book with benefit, and could often help his patients by expounding for their benefit some of the theories it propounds.

Epilepsy: Grand Mal, Petit Mal, Convulsions. By Letitia Fairfield, C.B.E., M.D., D.P.H.; 1954. London: Gerald Duckworth and Company, Limited. 7¾" × 5", pp. 160, with eight illustrations. Price: 8s. 6d.

THIS book by Dr. Letitia Fairfield is one of a series designed both to give the patient an understanding of his condition which will improve his cooperation in treatment, and to assist nurses, social workers, teachers and others in their handling of the patient. In the general description of epilepsy and its various manifestations reference is made to its incidence, estimated as from three to five per 1000, to the relationship between epilepsy and intelligence, and to the electroencephalogram. In the chapter on treatment, due emphasis is laid on difficulties in determining the most appropriate drugs and dosages for each patient and on continuity of medication, which the hospital class of patient often fails to appreciate, to his great disadvantage. Specially to be noted in this book are the chapters on the epileptic child at home and at school, on employment, and on epileptics in the community; they are full of information and advice to those who may have to deal with epileptics in their various vocations. These chapters are of considerable interest to the senior medical student and young graduate also. In England there are over 3000 beds in colonies and houses for epileptics, not including those in mental hospitals and mental deficiency institutions. This book, which is illustrated, adequately fulfils its object.

Reactions with Drug Therapy. By Harry L. Alexander, M.D.; 1955. Philadelphia and London: W. B. Saunders Company. Melbourne: W. Ramsay (Surgical), Limited. 9¼" × 6¼", pp. 314, with 33 illustrations. Price: £3 11s. 3d.

DRUG REACTIONS have become an increasingly common feature of modern therapeutics. From the introduction of the sulphonamides some twenty years ago these phenomena have occurred with increasing frequency owing to the repeated use of drugs which can produce sensitization in man and their administration to an ever-increasing section of the population.

There is, it is true, a very comprehensive, but also very scattered, literature on the subject, but this book brings together for the first time a reasonably complete account of the problem in all its aspects.

It has been claimed that almost any drug can cause sensitization, and one would imagine that the production of a useful book would be almost impossible. In fact, however, only a few hundred drugs have been shown to induce hypersensitivity, and many of these are no longer included in modern treatment.

Reactions to drugs fall into well-defined clinical patterns, and four chapters are devoted to discussions of the mechanisms for drug reactions and the dermatological and systemic manifestations which result therefrom. The author then continues his subject by a systematic account of drug reactions in specific groups of drugs. The sulphonamides, antibiotics, antiarthritic drugs, sedatives, antihistamines, cardio-vascular drugs and antithyroid drugs are each the subject of a chapter, and adequate references are given at the end of each. In addition the vitamins, sera and vaccines, plant products and many other drugs and chemicals are fully considered from this aspect.

The book is pleasingly arranged with a general discussion at the beginning of each chapter, followed by the consideration of the individual drugs in detail. The illustrations are excellent and the production of the volume is of a high standard. This book is certainly a "must" for the dermatologist and consultant, and could be very useful indeed to the general practitioner.

The Lung: Clinical Physiology and Pulmonary Function Tests (Based on the 1954 Beaumont Lecture). By Julius H. Comroe, junior, M.D., Robert E. Forster, II, M.D., Arthur B. Dubois, M.D., William A. Briscoe, M.D., and Elizabeth Carlsen, A.B.; 1955. Chicago: The Year Book Publishers, Incorporated. 9¼" × 6", pp. 228, with 57 illustrations. Price: $5.00.

THE great increase in the scope of pulmonary medicine and surgery in recent years has stimulated interest in a more precise knowledge of respiratory physiology and its dis-

turbance in disease. Until the publication of "The Lung", most of this knowledge had to be sought in journals devoted to physiology and thoracic medicine. In this volume, however, an excellent account is given of practical studies in pulmonary function, beginning with basic principles and concluding with well-chosen examples of the application of these studies to actual clinical problems. The authors are careful to point out that tests of pulmonary function supplement and do not replace a good history, physical examination, radiological, bacteriological, bronchoscopic and pathological studies. No single test yields all the information, and the tests fall into three groups: (*a*) ventilation (volume and distribution), (*b*) diffusion, and (*c*) pulmonary capillary blood flow. Each is thoroughly discussed, and the text is generously and clearly illustrated by well-designed diagrams. There is also an appendix of useful data, equations and calculations, a classified list of references and a full index.

The book is very readable, as the authors have set out to write primarily for physicians and medical students, and it can be heartily recommended to those who wish for a full understanding of the complex disturbances of function which occur in respiratory disease.

Notes on Books, Current Journals and New Appliances.

AN INTERNATIONAL JOURNAL ON ALCOHOL.

THE first number of the *International Journal on Alcohol and Alcoholism* has appeared bearing the date April, 1955. It will be published three times a year. In the opening editorial it is stated that it is only within our own time that the study of alcohol and its repercussions has become a science in its own right. This has produced a mounting tide of publications; nearly a million words on alcohol appear in medical journals alone. The determination of this fact must have involved a great deal of labour. We may take it, however, that the output of writing on alcohol and alcoholism is very large. This new journal has been founded to deal with facts and figures rather than hypotheses. It is to be the official organ of the International Institute for Research on Problems of Alcohol whose headquarters are at Geneva. It will use five languages—English, French, German, Italian and Spanish. The first issue contains articles on alcoholism in Canada (in English), on alcoholism in Austria (in German) and on the use of intensive electroconvulsive therapy in the treatment of chronic alcoholism. There is a classified bibliography on "Antabuse". The publishers are Blackwell Scientific Publications, Oxford. The subscription is thirty shillings a year.

Family Doctor. Published monthly by the proprietors, the British Medical Association, Tavistock Square, London, E.C.1. Sole agents for Australia and New Zealand: Gordon and Gotch (Australia), Limited. Subscription for twelve months: 20s. (sterling), including postage.

Family Doctor continues to make its attractive appearance each month. The continued high standard of the cover pictures, mostly of children, is an achievement in itself, and we have seen none better than those on the issues for June and July, 1955. Special articles in the June number deal with the Fountain Hospital for Mentally Handicapped Children, snoring, quadruplets, the importance of exercise, modern heart surgery, and a good many other subjects. In the July number is an important article on the genetic effects of the hydrogen bomb, and other subjects dealt with include learning to be a nurse, how to live with your duodenal ulcer, adolescent boys and the way they dress, babies and wind, and artificial respiration. In both are the usual articles on cooking, popular science, beauty hints, answers to questions and correspondence, as well as the new *Family Doctor* feature, the sixteen-page home-making supplement.

Books Received.

[*The mention of a book in this column does not imply that no review will appear in a subsequent issue.*]

"Synopsis of Audiology", edited by William M. Fitzhugh, jnr., M.D., C.M., D.Sc. (Med.); 1955. California: J. W. Stacey, Incorporated. 11" × 8½", pp. 88.

Intended as a guide to those entering on the study of audiology.

"Clinical Pathology in General Practice"; specially commissioned articles from the *British Medical Journal*, October, 1953, to July, 1954; 1955. London: British Medical Association. 8½" × 5½", pp. 332, with many illustrations. Price: 21s.

The chapters in this book appeared as articles in the *British Medical Journal*.

"Backache in Women", by E. Schleyer-Saunders, M.D., F.I.C.S., with a foreword by W. C. W. Nixon, M.D., F.R.C.S., F.R.C.O.G.; 1955. Bristol: John Wright and Sons, Limited. 8½" × 5½", pp. 80, with six illustrations. Price: 7s. 6d.

The author presents her own experiences with the problem of backache.

"Psychoanalysis: Practical and Research Aspects", by Willi Hoffer, M.D. (Vienna), Ph.D. (Vienna), L.R.C.P., L.R.C.S. (Edinburgh), L.R.F.P.S. (Glasgow). The Abraham Flexner Lectures Series Number Twelve; 1955. London: Baillière, Tindall and Cox. 8" × 5½", pp. 112. Price: 27s. 6d.

The author is editor of *The International Journal of Psycho-Analysis*.

"The Spine: A Radiological Text and Atlas", by Bernard S. Epstein, M.D.; 1955. Philadelphia: Lea and Febiger. Sydney: Angus and Robertson, Limited. 10" × 7", pp. 540, with 331 illustrations. Price: £9 1s. 6d.

Based on twenty years of observations of disease of the vertebral column.

"High Blood Pressure", by George White Pickering, M.A., M.B. (Cantab.), M.D. (Ghent), F.R.C.P.; 1955. London: J. and A. Churchill, Limited. 9½" × 6", pp. 556, with 106 illustrations. Price: 65s.

The purpose of the book is to explain new views on essential hypertension and to relate them to established knowledge.

"Human Physiology", by F. R. Winton, M.D., D.Sc., and L. E. Bayliss, Ph.D.; Fourth Edition; 1955. London: J. and A. Churchill, Limited. 9½" × 6", pp. 628, with 236 illustrations. Price: 32s.

Addressed primarily to the medical student.

"A Textbook of Medicine", edited by Russell L. Cecil, M.D., Sc.D., Robert F. Loeb, M.D., Sc.D., D.Hon.Causa, LL.D.; associate editors, Alexander B. Gutman, M.D., Ph.D., Walsh McDermott, M.D., and Harold G. Wolff, M.D.; Ninth Edition; 1955. Philadelphia and London: W. B. Saunders Company. Melbourne: W. Ramsay (Surgical), Limited. 10" × 7", pp. 1820, with 201 illustrations. Price: £7 10s.

The eighth edition was published in 1951; there are 172 contributors to this.

"Collected Papers of The Mayo Clinic and The Mayo Foundation", edited by Richard M. Hewitt, B.A., M.A., M.D., A. B. Nevling, M.D., John R. Miner, B.A., Sc.D., James R. Eckman, A.B., M.A., Ph.D., M. Katharine Smith, B.A., Carl M. Gambill, A.B., M.D., M.P.H., Florence Schmidt, B.S.E., and George G. Stilwell, A.B., M.D.; Volume XLVI, 1954; 1955. Philadelphia and London: W. B. Saunders Company. Melbourne: W. Ramsay (Surgical), Limited. 9½" × 6", pp. 852, with 189 illustrations. Price: £6 5s.

The material represented in this volume comprises 629 papers; 62 of them appear in full, 52 in an abridged form, 20 in abstract and 495 by title only. Of the last-mentioned group 94 have appeared in *Proceedings of the Staff Meetings of the Mayo Clinic*.

"Surgical Forum: Proceedings of the Forum Sessions, Fortieth Clinical Congress of the American College of Surgeons, Atlantic City, N.J., November, 1954"; Committee on Forum on Fundamental Surgical Problems: Harris B. Shumacker, jnr., M.D., F.A.C.S., Indianapolis, Chairman, J. Garrott Allen, M.D., F.A.C.S., Chicago, Bradford Cannon, M.D., F.A.C.S., Boston, Warren H. Cole, M.D., F.A.C.S., Chicago, Robert E. Gross, M.D., F.A.C.S., Boston, J. Albert Key, M.D., F.A.C.S., St. Louis, C. Hunter Sheldon, M.D., F.A.C.S., Pasadena, Howard C. Taylor, jnr., M.D., F.A.C.S., New York, and Samuel A. Vest, M.D., F.A.C.S., Charlottesville; 1955. Philadelphia and London: W. B. Saunders Company. Melbourne: W. Ramsay (Surgical), Limited. 10" × 6½", pp. 892, with many illustrations. Price: £5.

There are 383 contributors.

"The Human Brain", by John Pfeiffer; 1955. London: Victor Gollancz, Limited. 8½" × 5½", pp. 284. Price: 16s.

Intended for people "without any formal training in science".

The Medical Journal of Australia

SATURDAY, NOVEMBER 5, 1955.

All articles submitted for publication in this journal should be typed with double or treble spacing. Carbon copies should not be sent. Authors are requested to avoid the use of abbreviations and not to underline either words of phrases.

References to articles and books should be carefully checked. In a reference the following information should be given: surname of author, initials of author, year, full title of article, name of journal, volume, number of first page of the article. The abbreviations used for the titles of journals are those adopted by the Quarterly Cumulative Index Medicus. If a reference is made to an abstract of a paper, the name of the original journal, together with that of the journal in which the abstract has appeared, should be given with full date in each instance.

Authors who are not accustomed to preparing drawings or photographic prints for reproduction are invited to seek the advice of the Editor.

THE PRESENT POSITION OF THE ARMY MEDICAL SERVICES IN AUSTRALIA: A NATIONAL SCANDAL.

In the correspondence columns of this journal on August 6, 1955, Dr. T. J. Ritchie gave expression to concern which has been felt by many for some considerable time about the present position of the medical services in the Australian army. The feelings of anxiety were accentuated by a report received from a medical officer, who gave notable service during the Second World War, after he had complied with a request to lecture to the members of a field ambulance in the Eastern Command (New South Wales). The lecturer found that the field ambulance was five medical officers short of its establishment. This meant that when the unit was in camp it had only three medical officers; sections had to go into training without medical officers, which they normally should have, and with only non-commissioned officers in charge. Inquiries have revealed that this state of affairs is quite common. In a large country centre in the Eastern Command, which can boast a large and efficient civilian medical personnel, there are no medical officers for the army units. A camp hospital and training depot in the Central Command has one medical officer well past the age of retirement. A week or two ago there were at Ingleburn in the Eastern Command three medical officers in a camp of 6000 men; six were needed. The army force to be stationed in the Near East will have with in only one Australian medical officer. But the instances of deficiency need not be multiplied; Dr. Ritchie was right in his contention that the position of the army medical services in Australia should be reviewed.

The Australian Military Forces are divisible into two main sections—the Australian Regular Army and the Citizen Military Forces. In the event of war the organization and administration of the medical services of a rapidly and vastly expanded force need well-trained medical officers. These cannot be trained at the outbreak of war, as has been shown in the history of the two World Wars. It is from the Royal Australian Army Medical Corps of the Regular Army that the medical staff officers so vitally needed should be obtained; and it is the Citizen Military Forces which will have to take the shock of attack and carry the burden of defence in any national emergency. National emergencies cannot be met by an army which lacks trained medical officers. And trained medical officers cannot be produced overnight. It does not matter how filled with national zeal and patriotism a man may be, what energy and resource he may display, how anxious he may be to "do the right thing"; if he does not know what is expected of him and how to do it in the right way, he will be an encumbrance and not a help. The first thing that has to be learned by anyone who is attached to an army in any capacity whatever is discipline. An undisciplined fighting force is a rabble—that is a fact which no one will deny. An undisciplined army medical service is not much, if any, better. We often hear it said that there is too much "red tape" in the medical services of the armed forces. To the medical officer who is an individualist (and most doctors are) this may appear to be true. But the man who thinks so is apt to lose sight of the fact that, once he has joined the medical services of the armed forces, he has acquired a dual allegiance—he certainly must do the best he can for his patient—sailor, soldier or airman—but he also has to see that what he does, in prevention of disease and in the treatment of the sick and disabled, is directed to the keeping of the fighting ranks as full as they can be kept. He is something like an industrial medical officer, but the industry with which he has to deal is the grim task of fighting the enemy. Coordination of treatment is essential and this often means that certain types of treatment have to be undertaken by specially selected and trained medical officers working in special types of unit. We recall, too, that in the two world wars special types of treatment were found by research to be more suitable than any other to wounds of certain kinds. It may thus be concluded that for effective service in the Army Medical Corps training is essential, together with a readjustment of mental outlook which is inseparable from the work that has to be done.

The training needed for medical service with the Citizen Military Forces of the Commonwealth is not excessive. Apart from occasional parades, all that a medical officer is called upon to do is to spend a fortnight in camp every twelve months. After two or three years any medical graduate with the necessary zeal and intelligence will fit himself for service in an emergency. Posts with the Citizen Military Forces are easier to fill than those with the Regular Army. It is the latter which give most cause for anxiety. It must be admitted that medical service with the Regular Army is not particularly attractive. The Regular Army has not hospitals of its own, such as the Navy and the Air Force have. The hospitals of the Repatriation Department take the patients from the Army, and medical officers of the Regular Army thus lack the

clinical experience which falls to the lot of medical officers of the Navy and Air Force. Secondly, while the payment of medical officers of the army is adequate, it cannot be regarded as generous; the result is that other avenues of medical practice have more appeal to the younger graduate. The third detraction is that an army medical officer has to go where he is sent, and such factors as housing are difficult to deal with. Of these three factors, probably the lack of attractive professional work is the most important. At the present time the Royal Australian Army Medical Corps has power to second medical officers for a period of six months to Repatriation hospitals as supernumerary medical officers, if they are serving a four-year short service commission. This is not satisfactory, as the medical officer is used at the whim of the Repatriation Department. It can, therefore, be easily understood that the lure of the Repatriation hospital is not particularly strong. Submissions have been made that army hospitals should be established as wings to Repatriation hospitals. If this was done it would not only provide army medical officers with the clinical work which they need, but it would give regular nursing sisters of the Army Nursing Service the practical nursing experience which they ought to have.

The remaining point to be considered is what can be done to secure medical officers for the Citizen Military Forces and the Australian Regular Army. If a national emergency arises there will be a rush to join both services; but, as has already been explained, that is no answer to the problem. Many people will probably suggest that as young men, adolescents, have to do a period of "universal training", it should be possible to postpone this training for men who will become medical graduates, that after graduation they can complete their period of compulsory training in the army medical service and thus solve all the difficulties for the Citizen Military Forces. This unfortunately cannot be the answer. One cannot determine in advance who, among medical students, will qualify and who will fall by the wayside; and if they all qualified, there would be too many to be fitted into the machinery of the service. What is needed here is an increased sense of duty to the nation's welfare and safety—a realization that the garb of medical practitioner, assumed at graduation, is that of a servant to the community and that this service does not cease when war comes. This garb is cut to fit the practitioner when there is no war, or shall we say that the practitioner fits himself to wear it. He must then equally fit himself to wear it when war arises. The conclusion is obvious—it is the bounden duty of every young medical graduate of military age to look into this matter and accept his responsibility. What of the medical officer for the Regular Army? This is a knotty but not insoluble problem. Canada has solved it. Canada has a scheme by which subsidies are paid to medical students who agree to serve in the army after medical graduation—the scheme is something like that described recently in these columns as operating for the recruitment of medical officers in Papua and the Territory of New Guinea. Such a scheme was announced by the Minister for the Army in September, 1954, more than twelve months after the commencement of the scheme for cadet medical officers for Papua and the Territory of New Guinea. No conditions have yet been laid down. In view of the known shortage of medical officers we are entitled to ask why it has taken so long to announce the initiation of this scheme. Matters should not be allowed to rest as they are—the present position is a public scandal. If war comes to this country again, it will almost certainly come with a speed never before imagined; regrets and explanations, or attempted explanations, will then be too late. Unnecessary loss of life will occur and the deficiencies may never be made good.

Current Comment.

EARLY POST-OPERATIVE AMBULATION.

DURING the last decade or so, medical authors have in increasing numbers discussed the advisability of getting their patients up out of bed as soon as possible after surgical operations and making them walk about. Those who advocate early post-operative ambulation are actuated by one of two motives if not by both. In the first place, it is claimed that early rising from bed is good for the patient, primarily because it encourages normal functioning of the various systems of the body, and secondly because it promotes the healing of wounds. The second motive has to do with the clearing of hospital beds. In these days, when there is a shortage of surgical beds in hospitals, the waiting time of patients will be reduced in proportion to the rapidity with which beds are vacated by patients operated on. Those who hold that body processes are promoted by shortness of stay in bed are at one with those who oppose excessive bed rest in medical conditions as well as surgical. We would remind readers of an important article published in the *British Medical Journal* of December 13, 1947, by R. A. J. Asher, and entitled "The Danger of Going to Bed". Asher's paper was the subject of a leading article in this journal on September 4, 1948, and we would commend this again to the attention of readers. He painted what he admitted to be a one-sided picture, and he did this to "disclose the evils of overdose". His words were so striking that they must be quoted again:

> What a pathetic picture he makes! The blood clotting in his veins, the lime draining from his bones, the scybala stacking up in his colon, the flesh rotting from his seat, the urine leaking from his distended bladder and the spirit evaporating from his soul.

Asher held that bed rest should be prescribed and not assumed to be necessary; in other words, a ward sister should not confine the patient to bed without the doctor's ordering it. He also held that doctors should revise their attitude to rest where it was unsound.

Every writer on the subject of early post-operative ambulation so far consulted gives credit for the initiation of this measure to E. Ries, who is stated to have written on "Some Radical Changes in After Treatment of Celiotomy Cases" in *The Journal of the American Medical Association*, Volume 33, 1899, at page 454. Unfortunately, we have been unable to verify this reference. Ries started something which, as we shall presently show, has brought about a surprisingly modern state of affairs. Before mention is made of what is being done at the present time, however, it will be well to refer to the conclusions of one or two other authors. In 1946, James B. Blodgett and E. J. Beattie[1] made a study of early post-operative rising and walking in patients who had been submitted to major intraabdominal surgical operations. They defined early rising as getting out of bed and walking on the first or second post-operative day. They analyse the total of 681 cases for post-operative complications and their causative factors. They found that patients who rose early were considerably stronger and had less pain in their wounds than the late risers. These patients were able to care for themselves on or about the fourth post-operative day and were ready for discharge from hospital

[1] *Surg., Gynec. & Obst.*, Volume 82, 1946, page 485.

considerably earlier than the control group. The incidence of wound disruption and wound infection was reduced in the early rising group. Moreover, the incidence of early pulmonary complications was somewhat lower in the early rising group. On the other hand, the incidence of deep leg vein thrombophlebitis was observed to be somewhat greater in this group. In 1951 an interesting contribution to the subject was made by J. W. D. Goodall.[1] This author made a survey of 836 patients in eight acute general hospitals. He found that many more patients would have been permitted to "rise early" if the necessary facilities had been provided. He pointed out that those partially ambulant would require more lavatories and bathrooms; and that a full regime of early ambulation would call for increased sitting-up space and dining facilities. He declared that early ambulation threw an initial strain on the nursing staff, and for this reason some of the patients observed in the hospitals were not up as soon as the surgeon wished. His conclusion generally was that a very strong case could be made for the practice of early ambulation, provided the necessary surgical and technical skill could be attained. He found that in the great majority of wards studied the normal practice still approximated much more closely to a traditional than to an early ambulation regime. He also found that an important secondary consequence of early ambulation was the increased effective capacity of the hospital resulting from reduction in the length of stay required. In 1952 Louis P. Palumbo *et alii*[2] published some results of primary inguinal hernioplasty. They made a statistical analysis of the results of 642 hernioplasties performed on 564 unselected male patients. A follow-up for a period of one to four years was obtained in 85·4% of the series. There were seven recurrences, or a recurrence rate of 1·4%. The recurrence rates in the groups of patients ambulatory on the first, seventh and fourteenth days were 1·7%, 0·95% and 2·04% respectively. The recurrence rate based on the total number of operations performed was 1·29%. Each group was stated to be sufficiently large to be statistically significant, so that from the figures quoted it was concluded that early ambulation did not appear to increase the recurrence rate. There were 99 post-operative complications, of which 20% involved the wound. There was a reduction in the incidence of complications which was dependent on the day of ambulation. Among patients who were ambulatory on the first day after operation, the incidence of complications was 7·2%, as compared with an incidence of 19·5% and 21·6% for the group of those ambulatory on the seventh and fourteenth post-operative days. The conclusion was that early ambulation effected a considerable reduction in the post-operative complications, particularly of the respiratory, gastro-intestinal and urinary tracts. In 1953, Palumbo with another group of co-authors[3] investigated the effects of early and late ambulation in a group of 2955 male patients who had major surgical operations performed at one hospital. Patients ranged in age from eighteen to eighty-six years. Early ambulation included patients who were up out of bed within the first three days of operation, and the average age of these was 43·5 years. Those who were walking about after the third post-operative day were classed among the late group, and their average age was 44·5 years. Ambulation consisted of rising from bed, standing, walking and sitting, either in a chair or on the side of the bed. The complication rate was significantly lower in the group which moved about early, the incidence being 4·3%, as compared with 9·9% in the late group. The average stay in hospital of patients in the early ambulation group was shorter by seven days than that of the patients in the late ambulation group. This meant a total saving of 12,145 hospital days. The patients in the early group required less sedation and narcotics for the relief of pain and were rehabilitated more rapidly than those in the late group.

We now come to the latest contribution to this subject, which is an article by Eric L. Farquharson, surgeon to the Royal Infirmary of Edinburgh.[1] Farquharson's article is entitled "Early Ambulation with Special Reference to Herniorrhaphy as an Out-Patient Procedure". The claim of other authors that early ambulation may prevent thrombosis has been borne out by Farquharson's experience of inguinal herniorrhaphy performed as an out-patient procedure. Among 485 patients so treated there was no instance of thrombosis. He points out that the effect of early ambulation on the patient's morale is incalculable. The patient quickly regains his strength because he has had had so little time in which to lose it. Farquharson states that if the patient can move about the ward free from pain, if his temperature and pulse chart are normal, if his bowels have moved naturally, if there are no special dietary restrictions, and if his wound does not require to be looked at for several days, there is no real reason why, provided his home conditions are suitable, he should not be allowed to leave hospital. In support of his contention that ambulant patients should be sent home, Farquharson points out that even the best equipped of modern hospitals make little provision for the needs of an ambulant patient. There are no comfortable armchairs or similar amenities, and washing facilities are often sadly limited. Emphasis should, of course, be laid on the patient's home conditions. If he is living alone or in uncomfortable or unhygienic surroundings, he had much better be left in hospital. Farquharson points out that the unfortunate man with an inguinal hernia can plead no urgency for his operation, and that his name is liable to remain indefinitely on a hospital waiting list, because there are always others whose claims seem to be more urgent. He operates on patients with inguinal hernia as if they were out-patients. No less than 485 patients have been treated in this way. Had all these patients been admitted to hospital for the customary ten days, they would have filled a 28-bedded ward continuously for nearly six months. The total period of hospitalization would have amounted to 4850 bed days. Readers with a mathematical turn of mind, who know what the cost of maintaining a patient in hospital is, can work out for themselves what a large saving could be effected if all hernia operations were carried out in this way. The operation in all of Farquharson's cases was performed under local anæsthesia. After the operation is over, the patient climbs down from the operating table, walks out of the theatre, dresses in his lounge suit, and then walks out to the ambulance in which he is taken home. The ambulance drivers are instructed that he is not to walk into his home, but to be carried into it, for by that time the effect of the local anæsthetic may have worn off. The patient is told that he will probably need to have three or four days in bed, but that he should get up for toilet purposes. He is asked to return to hospital in eight or nine days for removal of his stitches. It is interesting that retention of urine has not occurred in Farquharson's herniorrhaphy series. He observes that the old gentleman who is returned to his own bed after operation, and who can walk to his own lavatory, seldom develops retention of urine.

Farquharson's report is of the greatest importance, and demands the earnest consideration of all general surgeons. One good point about his procedure is that those who adopt it will need to become masters of local anæsthesia, a method of practice which is unfortunately not sufficiently developed in this country. For those who are not prepared to adopt new methods, the idea of a patient getting off an operation table and climbing into his lounge suit may seem hazardous in the extreme. All the work that has been done on the matter of early ambulation, however, tends to show that this procedure is not unjustifiable. It may safely be prophesied that in the not very distant future such a method of operating on herniæ will become almost universal practice. Even the fear of litigation in the event of possible complications will not impede surgical progress of this kind. Procedures are accepted nowadays which a generation or two ago would have been looked on as unthinkable. We may be certain that before long a volume of indisputable evidence in favour of Farquharson's

[1] *Lancet*, January 16, 1951, page 43.
[2] *Arch. Surg.*, Volume 64, 1952, page 384.
[3] *Am. J. Surg.*, Volume 85, 1953, page 544.

[1] *Lancet*, September 10, 1955, page 517.

procedure will be forthcoming. Incidentally this discussion on herniorrhaphy recalls the teaching of the late R. Hamilton Russell, of Melbourne, that all that was needed for the cure of a hernia was the tying off of the sac.

A DIURETIC FOR ORAL ADMINISTRATION.

THE discovery of a safe and effective diuretic which can be taken by mouth has been urgently desired by doctors and patients alike for many years. Now at last this goal seems to be well in sight in the form of the drug "Diamox". Many private surgeries and hospital out-patient departments have patients seeking symptomatic relief from œdema by injections of mercurial diuretics. Not only is this an inconvenience to patients and doctors, but also the mercurial diuretics are not entirely without risk to the patient. Oral administration of theophylline and ammonium chloride has been known for its diuretic effect for some years, but the main use of these drugs is as adjuvants to the mercurial diuretics. More recently exchange resins have been tried, but they have not yet been fully investigated. When the sulphonamides were first used extensively for bacteriostasis, some of them were found to cause diuresis together with alkalinization of the urine. This was due to specific inhibition of the enzyme carbonic anhydrase within the renal tubules, causing increased excretion of sodium, potassium and bicarbonate ions. Sulphonamides have no effect on carbonic anhydrase elsewhere in the body.

In the search for a safe sulphonamide with diuretic action 2-acetylamino,1,3,4-thiadiazole-5-sulphonamide ("Diamox") was isolated. This substance has no antibacterial action. It is completely absorbed from the small intestine and excreted unchanged in the urine. Diuresis occurs in from two to six hours after ingestion of "Diamox". Its toxicity is very low. J. Beyreder and E. Herzog[1] have treated 70 patients with "Diamox" for just over one year. The best results were obtained with patients suffering from congestive cardiac failure, but patients with œdema from other causes also derived considerable benefit. When tried on thirty-two patients with congestive cardiac failure accompanied by widespread œdema and in some cases by ascites, "Diamox" caused a very large diuresis in 23 cases, mild diuresis in six, and had no effect on three patients, one of whom died whilst under treatment. The type of causal heart disease (hypertension, myocardial damage, or valvular defect) seemed to have no influence on the action of "Diamox". All these patients were also on a diet with a low sodium content and on cardiac drugs such as digitalis or strophanthin and theophylline. In most instances the twenty-four-hour urinary output was doubled at the commencement of "Diamox" therapy. The diuresis was least in the case of those patients whose cardiac efficiency could not be much improved. No toxic symptoms were observed in this group of patients, even on a dosage as high as 0·75 to 1·0 gramme per day. The second group treated by the authors comprised 21 patients with ascites or œdema due to hepatic cirrhosis. Eleven of these patients responded well to the drug. Of the 10 who did not respond three were already *in extremis*. In some of the cases the response fluctuated from day to day. The diuresis was greatly aided first by *paracentesis abdominis*, and by concurrent treatment of the hepatic condition. Three patients from this group showed side effects consisting of mental confusion, drowsiness and motor hyperactivity. In each case these symptoms were relieved within three days by the oral administration of potassium. In no case did "Diamox" appear to cause a further deterioration of the liver function. The authors' third group consisted of patients suffering from a variety of other diseases in whom œdema had occurred after prolonged treatment with cortisone, ACTH or "Butazolidin". Once again results were good, in some instances even when administration of the causal drug was continued.

"Diamox" had no effect in one case of ascites due to tuberculous peritonitis and in one case of polyserositis, possibly because of the presence of an inflammatory process. It also had slight or no effect in two cases of lipoid nephrosis with widespread œdema.

Optimal dosage was found to be 125 to 250 milligrammes daily, or 250 milligrammes twice daily for two days, followed by a two to three day rest period. An initial high dosage was of no advantage. If "Diamox" was used in amounts of over 250 milligrammes per day for prolonged periods, its efficiency appeared to diminish. "Diamox" caused no gastric or intestinal upsets, nor were any changes found in the blood picture in any of the patients treated.

[1] *Wien. med. Wchnschr.*, 1955, 105, 408.

GLYCERYL TRINITRATE IN CORONARY PATIENTS.

ALTHOUGH glyceryl trinitrate is a most useful drug in the treatment of *angina pectoris*, it may have adverse effects. H. I. Russek, K. F. Urbach and B. L. Zohman have discussed[1] the nature of the action of glyceryl trinitrate on the circulation and the paradoxical effects which may be produced by its use in certain patients with *angina pectoris*. The balance of evidence from their own and other people's work makes it appear that the drug exerts specific effects on coronary blood flow (increase), venous return to the heart (decrease), stroke volume (decrease), peripheral resistance (decrease), cardiac rate (increase) and blood pressure (decrease). In most patients the overall effect is beneficial for the coronary circulation, but occasionally some of these changes in the vascular system are so pronounced that, by decreasing coronary flow or increasing cardiac work, they overbalance the effects of the coronary dilatation. In these cases circulatory collapse and syncope may occur. The authors have studied the electrocardiographic responses to standard exercise, as modified by varying doses of glyceryl trinitrate (0·2 to 1·2 milligrammes or 1/300 to 1/50 grain), in 158 patients with coronary disease.

A glyceryl trinitrate tablet of varying dosage was placed under the tongue five minutes before the standard Master two step test was carried out and the results were compared with findings in studies without prior medication. With a dose of 0·4 milligramme (1/150 grain) 105 patients showed a normal response, 26 an improved response, 11 no significant change, and 16 patients even greater abnormalities than were observed in control tracings. Among the patients who showed good results with 0·4 milligramme there were 16 who showed a less response or a paradoxical response when a larger dose was given (0·6 to 1·2 milligrammes). The majority of these patients responded as well to 0·2 or 0·3 milligramme as they did to 0·4 milligramme. Five of the eleven patients who showed no significant change with 0·4 milligramme responded favourably to larger doses. Apparently one must take cognizance of the individual patient's reactions to the drug in a rational therapy in *angina pectoris*.

The effect of glyceryl trinitrate on the resting electrocardiogram in 16 patients who responded paradoxically to the drug when given exercise tests caused the authors to make certain conclusions. In all these cases the electrocardiographic changes induced by glyceryl trinitrate were similar to those recorded in the exercise test. Paradoxical response to glyceryl trinitrate is caused by venous pooling in the lower extremities, diminished venous return to the heart and reduced coronary blood flow in spite of coronary dilatation. Elastic bandages on the legs to a large extent prevented these effects of glyceryl trinitrate. An abdominal binder with leg bandages could be very useful in *angina pectoris*; however, the legs are here the more important venous reservoir, especially when standing.

It has obviously not been thoroughly appreciated that while glyceryl trinitrate is a most useful drug in the treatment of *angina pectoris*, it has latent potentialities

[1] *J.A.M.A.*, July 23, 1955.

for adverse effects. Possibly a smaller dose—0·2 to 0·3 milligramme or 1/300 to 1/200 grain—than the usual one is the optimal dose in most cases.

ANTIMETABOLITES.

THE term "antimetabolite" has now come into general use. It refers to some inactive compound which, by reason of its similarity in molecular structure to an essential metabolite, may be taken up by a biological system and incorporated therein, by mistake so to speak, thereby rendering that system inactive. At the present time, the essential metabolites referred to are the vitamins and the essential amino acids, and the biological systems are the enzyme systems made up of these metabolites. "Antimetabolite" is not, in many ways, a really suitable term. It parallels "antivitamin", of which examples are avidin, which combines with biotin and renders it unavailable, and rancid fats, which oxidize vitamins *A* and *E*; the action of an "antimetabolite" is quite different. It is a pity that Mellanby's term "toxamin" could not be revived; it was invented for a hypothetical substance in cereals thought to be antagonistic to vitamin *D*, and it lapsed when it was found that there was no such antagonist, but that the phytic acid of cereals fixed calcium in an insoluble compound. If "vitamin" is a substance vital to life, "toxamin" would be an ideal name for substances very similar to vitamins, acting through the same mechanisms, yet inimical to life. However, so long as it is recognized that the antimetabolites do not directly attack essential metabolites, but merely compete with them on a numerical basis determined by their molar ratios, the name will serve.

The most familiar example of competition and "cell-blocking" is that between the sulphonamide molecule and para-aminobenzoic acid in the metabolic processes of certain bacteria. This type of action is of the greatest importance in medicine. Naturally occurring antimetabolites are few—those in the antibiotics are the commonest—but many have been synthesized, and as more is learnt of the micrometabolism of cells, so the prospects of purposeful synthesis of specific antimetabolites for various purposes will expand. Conversely, antimetabolites are being used as tools for studying cell metabolism, and this may open the way to antimetabolite control of cancer as well as of metabolic aberrations.

In *The American Journal of Clinical Nutrition* for July-August, 1955, there is a symposium on the antimetabolites which gives details of recent research. The details are very complicated, and nothing of practical value seems to have emerged so far, but there are indications that understanding of the various mechanisms is becoming greater in some instances. For instance, L. R. Cerecedo, in discussing antimetabolites of thiamine, shows that oxythiamine given to mice in a molar ratio to thiamine of 25:1 causes loss of appetite and of weight, but no polyneuritic signs, whereas neopyrithiamine in a molar ratio of only 1:1 promptly causes polyneuritis. Further investigations seem to suggest that oxythiamine takes thiamine's place as the coenzyme in combining with the apoenzyme, thereby forming an aberrant enzyme, whereas neopyrithiamine forestalls thiamine in phosphorylation, thus causing a lack of effective thiamine diphosphate to combine in the enzyme. This work opens the way to the use of antimetabolites with highly selective action—so selective, perhaps, that a minute metabolic variation between malignant and normal cells could be taken advantage of.

In the case of riboflavin, dealt with by J. P. Lambooy, and of pyridoxine, dealt with by W. W. Umbreit, there are so many reactions in which they are involved that no single antimetabolite has been found to compete in enough fields and produce any measurable effects. However, the fact that very few pathogens need extraneous riboflavin, whereas their hosts do, suggests a differentiation that might be taken advantage of, while the paradoxical situation that pyridoxine is antimetabolic for desoxypyridoxine, but the reverse does not apply, offers promise in dealing with certain tumours.

By giving large doses of omega-methylpantethine to subjects fed on a purified diet, W. B. Bean, R. E. Hodges, Kate Daum and G. H. M. Thornton[1] have succeeded in inducing pantothenic acid deficiency in man. The effects are neuromotor dysfunction, cardio-vascular instability, depression of gastric secretion, physical and mental depression, and liability to infections. Nevertheless only temporary effects could be produced on microorganisms by a series of antimetabolites tested by Bird and his colleagues, and results in animals were varied. D. W. Woolley has discovered a naturally occurring substance, the toxin of *Pseudomonas tabaci*, which is an analogue and antimetabolite of methionine; this purified toxin can reproduce the typical disease caused by its parent organism in the tobacco plant, and it is fully competitive with methionine in the metabolism of *Chlorella vulgaris*. It is probable that most successful galenicals depend on natural antimetabolites for their action. The symposium ends with a discussion by J. N. Burchenal on the antimetabolites of folic acid, some of which have already been used to produce remissions in leuchæmia, and one by G. H. Hitchings on competitors of purine and pyrimidine. From this emerges a point of interest—pyrimethamine ("Daraprim") is an antimetabolite of folic acid, and is also used in the prophylaxis of malaria. Overdoses are highly toxic, and so far no known antidote has been recommended. It may be just barely possible that large doses of folinic acid ("Leucovorin") given intravenously would be of value. In any case, it is obvious that there is a tremendous field, with promise of great things, now opened up by investigations of this type.

CHANGE OF TITLE FOR ROYAL SANITARY INSTITUTE.

THE Royal Sanitary Institute has announced that in future it will be known as the Royal Society for the Promotion of Health. The change in title, which has been approved by Her Majesty the Queen, who is the Patron, has since been unanimously adopted at an extraordinary general meeting of the members of the Institute from all parts of the United Kingdom, including Cornwall, Wales, Northumberland and Northern Ireland. In announcing the change of title, it is pointed out that when the Institute was formed nearly eighty years ago, the meaning of "sanitary" was "pertaining to health". Today, however, it is felt that the word "sanitary" not only is a misnomer, but by no means covers the scope and work of this organization's activities, which now include all aspects of health from personal hygiene to food, nutrition and mental health. The Royal Sanitary Institute was founded in 1876 for the purpose of promoting the health of the people. It has over 12,500 members, and has branches in Australia, New Zealand and South Africa, and 20 overseas examination boards. The first Fellows included such historic figures as Sir Edwin Chadwick, Sir Benjamin Ward Richardson and Florence Nightingale.

As part of its new developments in the field of preventive medicine, including dental health and health engineering, the Royal Society for the Promotion of Health recently announced that it had asked Sir Hugh Casson to draw up plans for the remodelling and modernizing of its museum of health at a cost of several thousands of pounds. It is anticipated that the new museum, which will be completed in the spring of 1956, will reflect the high standards of modern technique now expected in the field of technology. This project and the adoption of a name in line with contemporary thought indicate vitality and a forward-looking policy. Change of name is not always easy in a well-established body—or for that matter, always wise, though few would question its wisdom in the present case.

[1] *J. Clin. Investigation*, July, 1955.

Abstracts from Medical Literature.

RADIOLOGY.

Gas in the Symphysis Pubis During and After Pregnancy.

J. L. WILLIAMS (*Am. J. Roentgenol.*, March, 1955) states that skiagrams of the pelvis of pregnant women near term revealed a streak of gas density in the *symphysis pubis* in 41·5% of cases. It is believed that this streak of decreased density is similar to the gas streak seen in joints of the extremities when traction is applied. Presumably the normal separation of the *symphysis pubis* during pregnancy results in a partial vacuum, and gas is released from the surrounding tissues into normal clefts in the fibrocartilage of the *symphysis pubis*. The gas streak may appear during the first trimester, but is most commonly seen during late pregnancy, and it persists for as long as three weeks after delivery. The gas streak is not present when there is a marked degree of separation of the pubic bones or marked mobility at the symphysis. Extensive permanent radiographic changes may occur in the medial portions of the pubic bones following moderate or marked separation at the *symphysis pubis* during pregnancy. The most common changes are cyst-like areas of bone resorption and irregularity and sclerosis adjacent to the symphysis. The residual radiographic changes in the pubis may simulate tuberculosis or other infection, *osteitis pubis* or rheumatoid arthritis.

Patent Ductus Arteriosus.

T. E. KEATS AND H. L. STEINBACH (*Radiology*, April, 1955) state that with increasing experience in the diagnosis of patent *ductus arteriosus* it has become evident that there exist wide variations in the physiological and pathological manifestations of this congenital anomaly. It is now obvious that clinical, laboratory and X-ray signs that have been described in the past may be atypical or absent. The skiagrams were studied in 100 cases of patent *ductus arteriosus* and their salient features tabulated. Cardiac enlargement was present in 73% of cases. The chambers most frequently enlarged were the left ventricle (68%) and the left auricle (67%). Enlargement of the left auricle, when present, was found to be of some value in differentiating patent *ductus arteriosus* from other congenital cardiac abnormalities. In 42% of cases X-ray evidence of right ventricular enlargement was present. This was observed in cases of presumed pulmonary hypertension as a result of a large ductus or constriction of the peripheral branches of the pulmonary arteries. One patient with a large right ventricle had persistent cyanosis from birth and a large ductus. Seven patients had cyanosis of varying degrees. Of the electrocardiograms 50% were interpreted as being abnormal; 30% showed left ventricular hypertrophy, 7% right ventricular hypertrophy, and 4% interventricular blocks. Cardiac and chamber enlargement was observed on the skiagrams in a larger number of patients than the electrocardiogram would indicate. The main pulmonary artery was enlarged in 68% of cases. As would be expected, the pulmonary veins were engorged in most cases in which the pulmonary arteries were enlarged. The "infundibulum sign" was found to be unreliable; it was detected in only 25% of the cases, and similar alterations of the aortic shadow were found in an independent survey of normal chests in the same age groups. In studying this group of films an attempt was made to establish criteria for a "typical" appearance of the heart and pulmonary vasculature in patent *ductus arteriosus*. Classically, the heart is moderately enlarged, with slight to moderate enlargement of the left atrium and left ventricle. The undivided portion of the pulmonary artery and the hilar shadows are slightly increased in prominence, and there is slight to moderate pulmonary vascular engorgement. The cardiac shadow was considered to have an appearance "typical" of patent *ductus arteriosus* in 41% of the cases. Amongst patients in the age group from five and one-half months to three years, it was considered typical in only 24%, whereas between the ages of ten and thirty-six years it appeared "typical" in 58%. The size of the ductus was found to correlate well with the degree of cardiac enlargement and pulmonary vascularity in the various age groups. Below the age of four years all patients had cardiac enlargement. To produce the same relative degree of cardiac and vascular enlargement in members of the older age groups a ductus of greater diameter was required.

Pathological Femoral Fractures due to Malignant Tumours Stabilized by Intramedullary Nails.

J. LYFORD (*Radiology*, February, 1955) reports two cases in which pathological fractures of the femur due to malignant tumours were stabilized by intramedullary nailing. In both instances amputation was refused by the patients and their families, and it became essential to stabilize the involved bones to prevent a painful bedridden existence. In spite of the theoretical risks involved in the use of intramedullary nails in the presence of malignant lesions, it was believed that, under the circumstances, the benefits of this procedure outweighed any possible untoward results. In one case the fracture was due to a carcinoma metastatic from the breast and in one to an osteogenic sarcoma. In each instance the patient remained mobile and relatively free from pain until death, about eight months after occurrence of the fracture. Serial skiagrams showed progressive replacement of the shaft of the involved femur by tumour tissue. It would appear that the tumour tissue replacing the bone was sufficiently "firm" to permit stabilization by the intramedullary rods, particularly as the tumour appeared to grow around the rod as it spread.

Pneumonitis following Radiation Therapy of Breast Cancer by Tangential Technique.

F. C. H. CHU, R. PHILLIPS, J. J. NICKSON AND J. G. MCPHEE (*Radiology*, May, 1955) describe the pulmonary changes following radiation therapy of carcinoma of the breast. The purpose of their paper is to demonstrate that a tangential technique decreases the incidence and severity of post-irradiation pneumonitis. The pathology of radiation pneumonitis is essentially that of an inflammation. There are œdema, congestion, lymphangiectasis, inflammatory cell infiltration, increased mucus secretion and desquamation of the alveolar and bronchial epithelium followed by regeneration. If the reaction is mild, it subsides in a few weeks or months and leaves little or no evidence of inflammation. In severe cases the inflammatory changes become chronic and may persist for months or years. There are excessive proliferation of connective tissue, chiefly in the alveolar wall, hyalinization and thickening of blood vessel coats, areas of atelectasis, emphysema and fibrosis. The symptoms of radiation pneumonitis vary from an occasional cough or slight malaise to an acute febrile illness with chest pain, constant cough and severe dyspnœa. The period of fever is usually brief, but the pain, cough and dyspnœa may last several weeks, and in the more severe cases become chronic. The X-ray diagnosis of radiation pneumonitis depends on the clinical history, the previous appearance of the lungs and the development of an area of increased density on the irradiated side. The increased density is sometimes homogeneous but is usually irregular, patchy and linear. It tends to start in the hilar area and then spread peripherally. In mild cases it may completely resolve within a few weeks. In severe cases the density becomes more irregular and extensive and may involve the entire lung; there may also be displacement of the mediastinum to the affected side and elevation of the diaphragm. The whole process may slowly regress in a period of months or even one or two years, and the appearance of the lung return to normal. In other instances residual fibrosis persists, appearing in the skiagrams as linear or (less commonly) patchy areas of density, with retraction and compensatory emphysema of the surrounding tissues. In the management of breast cancer, irradiation of local extensions, the lymphatic channels and regional lymph node metastases is in general desirable; so that exposure of that part of the lung immediately subjacent to the chest wall is unavoidable. With the direct portal technique, however, much more than this unavoidable minimum is irradiated; this results in an unnecessarily high incidence of radiation pneumonitis. In the 120 to 250-kilovolt range of X-ray therapy, radiation pneumonitis develops in approximately 60% of cases. With the tangential technique and with tumour dose levels of 3500*r* to 4000*r* at 250 kilovolts, the incidence of radiation pneumonitis was only 7%. Furthermore, in approximately 20% of cases extensive pulmonary fibrosis has developed after direct portal irradiation, while only one of 100 patients (1%) had pulmonary fibrosis—and that of minimal degree—after tangential irradiation.

Pulmonary Œdema.

D. M. GOULD AND D. J. TORRANCE (*Am. J. Roentgenol.*, March., 1955) state that acute pulmonary œdema may begin

with terrifying suddenness or may gradually develop from a mild form of paroxysmal nocturnal dyspnœa which is frequently alleviated when the patient sits up or walks about. From this mild stage the patient may develop cardiac asthma manifested by considerable shortness of breath (with special difficulty in the expiratory phase), orthopnœa and great anxiety. The chronic form may be quite insidious. Some shortness of breath and cough productive of blood-tinged sputum are often noted in nephritics with pulmonary œdema. Orthopnœa is not always present. When the œdema is central, râles may be inconstant or absent. In cases in which pulmonary œdema is associated with nephritis, one frequently notes nausea, vomiting, anæmia, petechiæ and ecchymoses in the skin, hypertension, a raised non-protein nitrogen blood level and occult or gross blood in the stools. The pulmonary œdema which the authors stress is the subacute or chronic form which frequently exists with such subtle clinical manifestations that it may be easily overlooked by the attending physician. It has been noted that the skiagram of the chest is frequently the first indication of the presence of pulmonary œdema. It is concluded that relative left ventricular failure is the element *sine qua non* for the development of pulmonary œdema. Radiologically, pulmonary œdema manifests itself by clouding or opacification of the lungs due to accumulation of fluid in the alveoli. The X-ray pattern of pulmonary œdema must be differentiated from congestive changes and also dilatation of the pulmonary arteries and veins. The pulmonary vessels are enlarged and dilated with any process which significantly increases the blood pressure or blood flow in the lesser circulation. These dilated and enlarged vessels are noted in such conditions as mitral stenosis and insufficiency, *cor pulmonale*, Eisenmenger's syndrome, Lutembacher's syndrome, septal defects and patent *ductus arteriosus*, among other conditions. If the vessels are simply enlarged, they are sharp and clear. In congestive changes due to left ventricular failure, the vessels are both enlarged and hazy in outline. Presumably there is interstitial œdema present, and perhaps very small collections of alveolar fluid which are not clearly distinguishable on the skiagram. There is no sharp line of demarcation between severe congestive changes and minimal pulmonary œdema. Venous dilatation, congestion and pulmonary œdema form a spectrum of pulmonary patterns which can change imperceptibly from one phase to the other. The authors consider as congestive those changes which are characterized by enlarged blood vessels with hazy outlines. Frank œdema is characterized by definite clouding or opacification of the lungs due to the accumulation of fluid in the alveoli. With frank œdema the opacification or consolidation completely obliterates the vessels traversing the œdematous portion of lung, since no contrast exists between the fluid-filled vessel and the fluid-filled alveoli. Because the alveoli are filled with fluid, the bronchi which traverse this portion of the œdematous lung are revealed as radiolucent linear arborizations, since to the X ray contrast exists between the fluid-filled alveoli and the air-containing bronchi.

Gas Embolus as an X-Ray Sign of Fœtal Death.

E. SAMUEL AND K. GUNN (*Am. J. Roentgenol.*, June, 1955) discuss 15 cases of fœtal death in which intravascular gas was seen, noted over a two-year period. In the authors' experience, intravascular gas is not an infrequent sign of fœtal death. It is postulated that gas in the fœtal intravascular tree is not necessarily a late sign of fœtal death and, in the series under review, occurred five times before the conventional and well known radiological signs (Spalding's sign and Hartley's ball sign) had appeared. In five cases out of 15, intravascular gas was the only radiological sign of fœtal death. It is postulated that gas in the fœtus arises not necessarily as a physico-chemical change in the blood elements but rather from a disturbance in the potential gradient between the maternal and the fœtal blood pressures. The frequency with which gas is located in the cardiac chamber itself suggests that the degree of gas may be sufficient to account for the actual cause of death—in other words, that the fœtus actually dies from an intracardiac gas embolus. The possibility of the Rh factor as the cause of the underlying placental change is considered, and it is noted that in this series extensive placental calcification was found in one case.

PHYSICAL THERAPY.

The Treatment of Thyrotoxicosis with Radio-Iodine.

R. H. CHAMBERLAIN, K. F. BALLS *et alii* (*Radiology*, June, 1955) report on experience of the treatment of thyrotoxicosis with radio-iodine in a statistically significant group of cases. During the period from November, 1947, to December, 1952, they treated 228 patients by this method, and from these have selected 180 who have been followed for one year or more after treatment and in whom the diagnosis was established beyond reasonable doubt. They state that the principal problem in the treatment of thyrotoxicosis with radioactive iodine is the selection of the dose which offers the maximum prospect of producing a permanent euthyroid state with minimal risk of residual hypothyroidism. They have not been satisfied with mathematical solutions currently used. Their choice of dose is based on rough estimation of the size of the gland and the clinical and tracer evidence of the severity of the disease. They consider treatment with radio-iodine the treatment of choice for the following types of patient: (*a*) those above the age of forty years with demonstrable goitre or with diffuse goitres; (*b*) those of any age with persistent or recurrent post-operative thyrotoxicosis. Pregnancy is considered a definite contraindication. The authors reject patients under the age of forty years, except in the event of post-operative recurrence or other unusual circumstances. This policy is based on the theoretical hazards of late carcinogenesis or genetic damage. Thyrotoxicosis was relieved after a single treatment in about 80% of cases, and after one or more treatments in 97·2%. A good result was obtained in all of 42 patients with post-operative recurrences. The incidence of protracted post-therapeutic hypothyroidism was 18·3%. The incidence of severe post-therapeutic reactions was low (2·8%).

Carcinoma of the Bronchus.

D. W. SMITHERS (*J. Fac. Radiol.*, January, 1955) reports on the treatment of carcinoma of the bronchus from the Royal Cancer Hospital and Brompton Hospital, London, which have been running a joint consultation clinic for the past ten years attended by a physician, a surgeon and a radiotherapist. A registration and follow-up scheme, in all cases of this disease, has been set up, and it is known what has happened to all the patients, whether treated or not, and whatever treatment was employed. From 1944 to 1950, 933 new patients with a diagnosis of bronchial carcinoma were seen at the clinic, and the diagnosis was subsequently rejected as having been made on insufficient evidence in 115 cases. This high figure is a reflection of the difficulties of diagnosis in this disease which occur even in special hospitals with every diagnostic facility. Nearly two-thirds of the patients have undifferentiated tumours and 80% of these are found to have metastases at autopsy. The proportion of metastases is high also in the adenocarcinomata and squamous carcinomata. Of the 818 cases in which the diagnosis was accepted on review, 497 had histological confirmation, and 321 had not; 28 of the patients were alive after three years—11 after surgery (four combined with radiotherapy) and 17 after radiotherapy. Of 171 patients with inoperable growths who had radical X-ray therapy, 15 were alive at the end of three years, and seven at the end of five years. The author states that probably the outstanding service the radiotherapist gives to these patients is the relief of superior vena caval obstruction, and the obstruction does not usually return if a tumour dose of 3000*r* is given. Hæmoptysis can frequently be arrested in a week, and dyspnœa and cough can often be relieved for long periods. Pain is difficult to relieve except in a bony metastasis. Many patients with few or no symptoms are best left untreated. One of the great benefits of supervoltage therapy is that this can now be administered without adding to the patient's distress at all in most cases, and producing a positive feeling of well-being in some with no skin reaction greater than a faint erythema and with little more than some evening fatigue in a few. This means that such an attempt is now far more justifiable than it was in the past. It is suggested that some patients with undifferentiated tumours should be treated by radiotherapy whether operable or not, that in cases of squamous cell carcinoma exploration be carried out and radioactive gold grains implanted if the condition is inoperable, and that for adenocarcinomata pre-operative deep X-ray therapy should be tried.

British Medical Association News.

ANNUAL MEETING.

THE annual meeting of the Queensland Branch of the British Medical Association was held at British Medical Association House, 225 Wickham Terrace, Brisbane, at 10.30 a.m. on Saturday, September 3, 1955, DR. H. STUART PATTERSON, the President, in the chair.

MINUTES.

The minutes of the previous annual meeting, held on August 21, 1954, were read and confirmed.

ANNUAL REPORT OF COUNCIL.

The annual report of the Council for the year ended June 30, 1955, copies of which had been circulated to members of the Branch, was taken as read, and was received on the motion of Dr. H. W. Horn, seconded by Dr. N. Gutteridge, and adopted on the motion of Dr. A. E. Lee, seconded by Dr. H. W. Horn. The report is as follows:

The Council has pleasure in presenting the sixty-first annual report of the work of the Branch for the year ending June 30, 1955.

Membership.

The membership of the Branch is 1134 *plus* 9 honorary life members, as against 1076 and 8 honorary life members in 1954, making a total gain of 58. There are also 107 honorary associate members, 45 of whom were elected this year. Sixty-three honorary associate members were elected to full membership on graduation.

The gains were: new members, 75; transfers from other branches, 40; members reinstated, 9. The losses were: members transferred to other branches, 55; deceased, 9; resigned, 2.

The following, by virtue of their fifty years' membership of the British Medical Association, have become honorary life members: Dr. Eleanor Bourne, Dr. A. B. Carvosso, Dr. H. R. Cope, Dr. J. A. Goldsmid, Dr. B. L. Hart, Dr. W. Wallis Hoare, Dr. T. A. Price (also Honorary Vice-President of the Branch), Dr. Woodburn Stevens, Dr. W. A. Beet.

Obituary.

It is with deep regret we record the death of Dr. M. Graham Sutton, former President of the Branch, Chairman of the Building Subcommittee and a member of the Ethics Committee.

With regret we record also the deaths of Dr. E. Lorimer Walker, a former member of Council; Dr. Paul Mitchell, late Deputy Director-General of Health, Queensland; Dr. L. M. McKillop, Past President of Queensland Cancer Institute; Dr. Charles Mitford Lilley and Dr. John Hardie, prominent Brisbane surgeons; Dr. A. J. Kennedy of Maryborough, and Dr. R. H. LaBarte Cummins of Caloundra.

Meetings.

In addition to the annual meeting, which included the Bancroft Oration, eight general meetings of the Branch were held, including two clinical meetings. The average attendance at the general meetings was 50.

Council.

Eighteen meetings of the Council were held. Record of attendance is as follows:

Dr. H. Stuart Patterson (President)	18
Dr. Alan E. Lee (President-Elect), Federal Council Representative	15
Dr. W. J. Saxton (Past President)	17
Dr. D. R. L. Hart (Honorary Secretary)	18
Dr. J. G. Wagner[1] (Honorary Treasurer)	14
Dr. T. V. Stubbs Brown (Chairman of Council)	18
Dr. D. C. Jackson (Chairman of Subcommittees, Councillor)	15
Dr. Charles Roe[2] (Secretary of Subcommittees, Councillor)	11
Dr. B. N. Adsett (Councillor)	13
Dr. B. L. W. Clarke (Councillor)	9
Dr. D. A. Henderson (Councillor)	13
Dr. G. V. Hickey (Councillor)	12
Dr. H. W. Horn (Councillor and Federal Council Representative)	15
Dr. H. R. Love (Councillor)	11
Dr. A. F. McSweeny (Councillor)	14
Dr. A. D. A. Mayes (Councillor)	12
Dr. R. B. Salter (Councillor)	14
Dr. W. H. Steel (Councillor)	13

[1] On leave two meetings.

[2] On leave five meetings.

Scientific Meetings.

July: Combined meeting with Queensland Division of Australian Veterinary Association — "The Leptospiroses".

August: Sir Alexander Murphy—"He that Increaseth Knowledge Increaseth Sorrow" (Bancroft Oration).

October: Dr. Konrad Hirschfeld—"Thomas Sydenham—The Father of English Medicine" (Jackson Lecture).

November: Clinical meeting in conjunction with the Mater Misericordiæ Hospital Clinical Society.

February: Clinical meeting in conjunction with the Brisbane General Hospital Clinical Society.

March: Dr. D. W. Johnson—"Preventive Medicine Abroad —With Special Reference to Poliomyelitis".

April: Dr. C. A. C. Leggett—"Recent Observations Overseas concerning: (*a*) The Management of Malignant Disease; (*b*) Arterial Grafting".

May: Dr. R. I. Meyers—"Rehabilitation: Problems and Prospects".

June: Symposium on sinusitis by Dr. Stephen Suggit, Dr. Peter Tod, Dr. F. Morgan Windsor, Dr. D. G. Neil.

Office Bearers and Councillors.

The following office bearers were appointed by the Council for 1954-1955: Chairman of Council, Dr. T. V. Stubbs Brown; Honorary Treasurer, Dr. J. G. Wagner (reelected); Chairman of Subcommittees, Dr. D. C. Jackson; Honorary Secretary of Subcommittees, Dr. Charles Roe; Honorary Librarian, Dr. Neville G. Sutton (reelected); Honorary Assistant Librarian, Dr. Konrad Hirschfeld (reelected).

Dr. D. R. L. Hart was elected Honorary Secretary, and in accordance with the by-laws the following were elected members of the Council for a period of two years, 1954-1956: Dr. T. V. Stubbs Brown, Dr. B. L. W. Clarke, Dr. D. A. Henderson, Dr. G. V. Hickey, senior, Dr. H. W. Horn, Dr. D. C. Jackson, Dr. H. R. Love, Dr. W. H. Steel.

For personal reasons Dr. D. A. Henderson and Dr. A. F. McSweeny have tendered their resignations as members of Council, which have been accepted with deep regret. We are also sorry to state that Dr. G. V. Hickey, senior, Dr. A. D. A. Mayes and Dr. R. B. Salter are not seeking reelection for the ensuing year.

Representation.

The Branch was represented as follows during the year:

Council of the British Medical Association: Dr. Isaac Jones.

British Medical Association, Representative Meeting, London, June, 1955, Delegate: Dr. K. B. Fraser.

Federal Council of the British Medical Association in Australia: Dr. H. W. Horn; Dr. Alan E. Lee.

Australasian Medical Publishing Company, Limited: Dr. Alan E. Lee (Director), Dr. T. A. Price, Dr. H. W. Horn (members).

Blue Nursing Service: Dr. L. P. Winterbotham.

College of Nursing, Australia (Queensland State Committee): Dr. D. A. Henderson.

Flying Doctor Service of Australia: Dr. Harold Crawford.

Medical Assessment Tribunal: Dr. G. W. Macartney.

Medical Board of Queensland: Dr. R. G. Quinn, Dr. F. W. R. Lukin, Dr. J. G. Wagner.

Medical Officers' Relief Fund (Federal): *Queensland Committee*: Dr. W. H. Steel, Dr. G. W. Macartney, Dr. K. B. Fraser.

Physical Fitness Association of Queensland: Dr. E. S. Meyers, Dr. Harold Crawford.

Physiotherapy Board of Studies: Dr. J. R. S. Lahz.

Post-Graduate Medical Education Committee: Dr. Alan E. Lee, Dr. B. N. Adsett, Dr. Charles Roe.

Queensland Bush Children's Health Scheme: Dr. H. W. Anderson.

Queensland Bush Nursing Association: Dr. L. Bedford Elwell.

Queensland Health Education Council: Dr. W. J. Saxton.

Queensland Institute of Medical Research: Dr. W. H. Steel.

Society of Laboratory Technicians of Australasia (Queensland Branch): Dr. J. V. Duhig, Dr. N. M. Gutteridge.

Federal Medical War Relief Fund: Local Committee of Management: Dr. J. G. Wagner (Chairman), Dr. F. W. R. Lukin (Honorary Secretary), Dr. J. V. Duhig, Dr. Harold R. Love, Dr. B. L. W. Clarke.

Surf Life Saving Association of Australia (Queensland Branch): Dr. F. W. R. Lukin.

Australian Association for Better Hearing: Dr. C. C. Wark, Dr. J. R. Hutcheon.

National Safety Council of Australia (Queensland Division): Dr. L. A. Little.

Red Cross Blood Transfusion Service Committee: Dr. K. B. Fraser.

Medico-Pharmaceutical Liaison Committee: Dr. R. S. Bennett, Dr. O. Hirschfeld, Dr. H. W. Horn, Dr. H. R. Love, Dr. A. D. A. Mayes

Medical Services: State Committee of Inquiry: Dr. K. B. Fraser, Dr. G. V. Hickey, senior, Dr. H. W. Horn, Dr. H. S. Patterson.

University of Queensland—Faculty of Medicine: Dr. H. Stuart Patterson.

The Editor of THE MEDICAL JOURNAL OF AUSTRALIA was represented by Dr. Felix Arden.

Ethics Committee.

The following were reelected members of the Ethics Committee at the last annual meeting of the Branch: Dr. Val McDowall, Dr. L. J. J. Nye, Dr. J. J. Power, Dr. R. G. Quinn, Dr. Norman Sherwood, Dr. F. W. R. Lukin and Sir Alexander Murphy. No meetings were held during the year.

Library.

Dr. Neville G. Sutton was reelected Honorary Librarian and Dr. Konrad Hirschfeld was reelected Assistant Honorary Librarian.

From June, 1954, to July, 1955, three hundred and eighty-five (385) journals and text-books were borrowed by members and other medical and scientific libraries.

It is gratifying to note that the increase in the use of the library facilities is still being maintained.

The Branch receives fifty journals, *plus* "British Surgical Practice", "The Medical Annual", a selection of year books on various subjects and other medical and clinical reports.

The Branch wishes to thank the Editor of THE MEDICAL JOURNAL OF AUSTRALIA for another donation of text-books, which are a valuable addition to the library.

The Association would like to acknowledge its appreciation of the cooperation and assistance rendered throughout the year by other branches and the medical and scientific libraries in Queensland.

Building Subcommittee.

Personnel: Dr. J. G. Wagner (Chairman), Dr. B. L. W. Clarke, Dr. J. R. Adam, Dr. A. D. A. Mayes, Dr. R. G. Quinn. The Subcommittee suffered a great loss by the death of Dr. M. Graham Sutton.

Progress in the new building project has been delayed owing to the Brisbane City Council having decided to resume portion of the Branch property to widen Bartley Street but subsequently having abandoned this proposal. The architect has been asked to produce a suitable plan to come within the scope of the finances of the Branch, which at present are somewhat limited. In view of the proposed resumption of portion of the land at the corner of Wickham Terrace and Bartley Street, an old cottage in the latter street, next door to the house already owned by the Branch, was purchased to extend the area of the land and make up for the loss which would have been caused if the City Council had proceeded with its intention. Total donations received to date, £1188 14s. It is hoped that further information will be available to be sent to members in the near future.

Organization Subcommittee.

Personnel of Subcommittee: Dr. D. C. Jackson (Chairman), Dr. Charles Roe (Honorary Secretary), Dr. B. N. Adsett, Dr. A. F. McSweeny, Dr. D. A. Henderson, Dr. H. R. Love, Dr. H. W. Horn and ex-officio members of the Council.

The Subcommittee held 21 meetings. It meets a few days before Council meetings to deal with correspondence and matters to be referred to Council, and to make recommendations where policy is not involved.

Medical Fees Tribunal.

Personnel: Dr. J. G. Wagner, Dr. N. Sherwood, Dr. R. G. Quinn, Dr. Alan E. Lee, Dr. D. C. Jackson. Five meetings were held during the year, at which seven cases were dealt with and adjudication submitted thereon to Council for necessary action.

Bancroft Oration.

The twenty-ninth Bancroft Oration was delivered at the annual Branch meeting on August 21, 1954, by Sir Alexander Murphy, Kt.Bach., M.C., M.D., Ch.M., F.R.C.P., F.R.A.C.P., the title being "He that Increaseth Knowledge Increaseth Sorrow".

At the conclusion of the Oration the Joseph Bancroft Memorial Medal was presented to the Orator by the President.

Jackson Memorial Lecture.

This lecture is an historical one delivered annually in memory of the late Ernest Sandford Jackson.

Dr. Konrad Hirschfeld gave the twenty-fourth Jackson Memorial Lecture on October 1, at the University of Queensland Medical School. His subject was "Thomas Sydenham —The Father of English Medicine".

Memorial Prizes, 1954.

At the annual general meeting of the Branch, to be held on September 3, the following prizes awarded on the recommendation of the Faculty of Medicine of the University of Queensland for 1954 will be presented by the President.

Memorial Prize of the Queensland Branch of the British Medical Association: Ralph Lionel Hockin, M.B., B.S., University of Queensland, 1954.

Harold Plant Memorial Prize: Bruce Kynaston, M.B., B.S., University of Queensland, 1954.

B.M.A. Memorial Roll.

This Memorial Roll commemorates the services of former distinguished members of the Queensland Branch of the British Medical Association.

According to custom the names appearing in the Memorial Roll of the Branch were read by the President at the annual general meeting held on August 21. The name of Wilton Russell Love has been added to the Roll.

Introduction to Private Practice.

Following the practice of the past two years, resident medical officers who are leaving the public hospitals were again invited to meet a senior practitioner with whom they might discuss various aspects of private practice. Six resident medical officers accepted the invitation and were met by the President of the Branch.

Branch Handbook.

This publication continues to supply members with much useful information. Copies are available at a cost of ten shillings each. New members who have recently graduated are supplied with a copy free as a gesture by the Branch. A copy of the by-laws of the Branch is included in the Handbook.

National Health Service.

The National Health Service is working smoothly and with advantage to a large section of the community, although its content of imperfections and anomalies has remained unchanged. These are most numerous in the medical benefits section, in which a review of benefits is urgently required, and your Council has not neglected this objective. In particular, the unjust refusal of the Minister to include for benefits those examinations by ophthalmologists where refraction is involved has been vigorously contested by both Branch and Federal Councils. This is regarded as a major issue and will have the further attention of the Federal Council at its meeting in August next.

Pharmaceutical benefits require little comment except that the annoyance of frequent alterations has not abated, though the Minister has promised his attention. It is the Pensioner Medical Service with which your Council is most preoccupied at the moment. The agreement under which the service was instituted expires on October 31 next and members will concur that a new agreement must arise. Some 7,000 new pensioners entered the service following the 1954 liberalization (though 70,000 were expected according to departmental estimates) and it is presumed that these will not now be rejected. With this exception it is proposed that the future Pensioner Medical Service will be open only to those who would have qualified for a pension under the means test operating in 1953. No concessional service will be provided for others by the medical profession. Problems of rates, scope of service and extended services by way of insurance are some of the matters to be decided by your Councils.

Though the cost to the Government, per pensioner, is lower in Queensland than in the other States, it is to be regretted that a few members have been called before the State Committee of Inquiry, mainly on the question of over-attendance. Council can only advise that the greatest care must be taken to limit attendances strictly in accordance with the medical needs of the patient.

When a doctor is called before a committee and is completely exonerated, it is unjust that he cannot recover at least his travelling expenses. Your Council has represented this to the Federal Council, who will in due course make an approach to the Minister.

Workers' Compensation.

Section 20 (iii) Regulations under the Workers' Compensation Act.—The significance of this Regulation was brought to the notice of members, namely: No payment of the cost of medical treatment will be met by the Insurance Commissioner unless the application for such payment is made by the worker within thirty days of completion of the medical treatment.

A review of the schedule of fees under the agreement existing between the Council and the Commissioner is at present before Council.

Policy in Relation to Colleagues.

This question was given consideration and members were notified that in Council's opinion services between colleagues should remain gratuitous and the rendering of accounts and partial payment by Medical Benefits Fund is undesirable.

British Medical Agency of Queensland, Proprietary, Limited.

During the past twelve (12) months there has been little alleviation in the locum position in spite of many more doctors having partners, associates or assistants, who would in many cases carry out these duties. Although fees have been increased considerably, this has in no way assisted the situation.

In the partnership, associateship and assistantship field the supply remains unequal to demand and many attractive opportunities, both city and country, are available.

An average number of medical practices have changed hands throughout the year, although there is difficulty in disposing of some of those in the country in spite of the offer of generous terms and, in many cases, finance availability. There are, at present, a very limited number of suburban practices for sale.

It is considered that the goodwill asked for practices in this State is reasonable.

Orthopædic walking frames are now available for hire and during the past few months three (3) of these units have been in use and in each instance the patient has conveyed his or her satisfaction from benefits derived.

An increasing number of doctors have inspected the large range of instruments and equipment on display and for sale on behalf of deceased and retired doctors and have benefited substantially in their purchases, particularly in the case of those members setting out in practice and desiring to curtail expenditure to a minimum.

General business remains at the high level of the past two (2) years and increases.

Another satisfactory year is reported.

Queensland Medical Finance Proprietary Limited.

The Company was established primarily to assist young medical practitioners in the purchase of approved practices or partnerships.

Requests for finance should be addressed to the Secretary of the Company at 225 Wickham Terrace, Brisbane.

Affiliated Local Associations.

Annual Conference.

The annual conference of representatives of local associations and members of the Council took place on Wednesday, August 25, 1954, at 9 a.m. at British Medical Association House.

The President of the Branch, Dr. Stuart Patterson, was in the chair and eight local associations were represented, in some instances by two members, and there were nine Councillors present.

Matters dealt with included: Medical benefits, *Pharmaceutical Benefits Act*—new regulations; Pensioner Medical Service; Committee of Inquiry under National Health Service; the new British Medical Association building; country representation on Council and visits of councillors to local associations; accident and insurance policies; administration of restricted drugs by dentists; part-time hospital medical superintendents; registration in New South Wales. Subsequently a report of the proceedings was sent to all affiliated local associations.

At the conclusion of the conference the visitors were entertained at luncheon at the United Service Club.

Cairns Local Association.

Meetings of the Branch have been held throughout the year at approximately six-weekly intervals. All meetings have been well attended. Office bearers for the year: President, Dr. Charles Knott; Secretary, Dr. G. F. Dixon.

The main item of interest is the decision to hold the next North Queensland Medical Conference in Cairns in 1956. The Secretary elected, Dr. W. R. Horsfall, has written advising the Branch Council of this proposal. Plans are still in embryo form only and Council will be notified of progress. The President of the conference will be Dr. Charles Knott.

We were recently delighted to receive a visit from Dr. Alan Lee of the Branch Council (June 18). His discussion of Council activities, medico-political and general subjects, was most informative and helpful.

Lecturers from the Post-Graduate Committee, Dr. Toakley and Dr. Gregory Murphy, also visited us from June 15 to 17. Dr. Toakley spoke on "Head Injuries" and Dr. Murphy on "Psychiatry in General Practice". Such visits are tremendously appreciated.

During the year several film nights have been held, the films being the property of various drug firms.

Recently, Dr. W. R. Horsfall has initiated clinical pathology discussions which it is hoped will become a regular event.

List of local members: Dr. Charles Knott, Dr. D. C. Sword, Dr. C. H. Mansfield, Dr. H. Flecker, Dr. J. H. Kennedy, Dr. J. H. Barnes, Dr. B. G. Clarke, Dr. T. R. Gregg, Dr. J. Brody, Dr. R. G. Wilson, Dr. I. A. Lester, Dr. W. R. Horsfall, Dr. G. Briggs, Dr. J. Taylor, Dr. G. F. Dixon, Dr L. Westaway.

GRAHAME DIXON,
Honorary Secretary.

Downs and South-Western Medical Association.

The twenty-eighth annual meeting of this association was held at Toowoomba General Hospital on September 25, 1954. The following office bearers were elected: President, Dr. G. V. Hickey, junior; President-Elect, Dr. D. Farmer; Past President, Dr. A. McGregor; Secretary-Treasurer, Dr. R. A. McCullagh; Auditor, Dr. M. Beale; Committee: Dr. C. Morton, Dr. J. W. P. Henderson, Dr. J. Woodburn, Dr. R. Spark, Dr. L. Fenwick.

The annual dinner was held on October 9, 1954, at which the guest speaker was the Chancellor of the University of Queensland, Dr. O. Hirschfeld. Other guests were representatives of local law and dental associations.

Four executive meetings and one general business meeting have been held during the year. To date, three visiting doctors have delivered lectures—Dr. E. Abrahams, Dr. David Henderson, and Dr. G. Murphy. During July a clinical meeting has been arranged, and a lecture will be delivered by Dr. Landy to a combined meeting of the medical and dental associations.

The Post-Graduate Medical Education Committee arranged a post-graduate course from May 27 to 29, visiting lecturers being Dr. K. Hirschfeld, Dr. L. Walters, Dr. P. Row and Dr. A. Cooper.

A successful social function in the form of a fork dinner, at which seventy were present, was held on May 28 in association with the post-graduate week-end course.

The Association is extremely grateful to all visiting lecturers and the Post-Graduate Committee

GLEN HICKEY, junior,
President.

ROBERT MCCULLAGH,
Honorary Secretary.

Ipswich and West Moreton Medical Association.

Monthly meetings were held at the Ipswich General Hospital and the majority of members took a keen interest in the Association. At these meetings general business was always discussed. Usually a visiting lecturer attended and gave a talk on his particular topic. We found these lectures of great value.

The annual meeting of the association was held at the Ipswich Men's Club on March 17, 1955. The attendance was excellent, and a very good night was had by all.

Dr. K. Hill was elected President for 1954. Dr. R. Yeates is President for 1955.

M. T. FISH,
Honorary Secretary.

Mackay Local Medical Association.

This has been our quietest year on record. No special business has been carried out. Local practitioners are, in general, not in favour of any rise in fees at present.

Dr. Lynch and Dr. Walters visited Mackay to discuss and criticize the medical service groups dealing with the subject of renal diseases in 1954. This year members of the medical service group are discussing the subject of cancer at their monthly meetings.

Local lecturers for the year at British Medical Association meetings were: Dr. I. Chenoweth—"Recent Changes in Military Medicine"; Dr. P. Hopkins—"Research in General Practice"; Dr. R. Grant—"Pitfalls in Diagnosis"; Dr. G. Bolton—"Retrodisplacements of the Uterus".

Visiting lecturers were: Professor R. McWhirter—"Breast Carcinomata"; Dr. P. Landy—"What Cases to Refer to a Neurophysician"; Dr. F. N. Hales—"Anticoagulant Therapy".

S. C. WILLIAMS,
Honorary Secretary.

Maryborough Local Medical Association.

The last annual general meeting was held on December 1, 1954, and the officers for the coming year were elected. President, Dr. J. Isles; Secretary, Dr. L. Proctor, Representatives to the Board of St. Stephen's Hospital, Dr. A. J. Kennedy, Dr. E. Theile.

In November of last year, Dr. Hayles and Dr. Alan Lee addressed the members at the General Hospital. Dr. Hayles spoke on certain disorders of the blood and Dr. Lee on National Health Service problems and on some aspects of abdominal surgery.

Another post-graduate meeting was held at the General Hospital on May 21, 1955. The visiting doctors were Dr. L. Sapsford, who spoke on post-partum hæmorrhage, and Dr. R. Bennett, who spoke on emergencies in anæsthesia. These bi-annual lectures by visiting specialists are very popular amongst the local members and the above lectures were very much appreciated by all members attending.

On May 24 the local association met Dr. Dowling in order to discuss certain aspects of the Pensioner Medical Service and as a result a much better understanding of the Service was reached by the members.

L. PROCTOR,
Honorary Secretary.

Nambour District Local Medical Association.

Another successful year of clinical and social relations in our association draws to an end. Our office bearers remain unchanged and our numbers likewise.

We still feel there is need for greater liaison between the Branch Council and local associations, otherwise the British Medical Association in Queensland does not function as an entity representative of the State. Also, apparently insufficient protest has been made to the powers that be *re* the unending and ofttimes unnecessary form filling. This does not detract from our harmonious relations between ourselves, our Parent Body and especially the Post-Graduate Committee and those specialists who so willingly give up their time to further our knowledge.

In the near future we intend extending our lectures to include a whole week-end of symposia on subjects of interest to country general practitioners, combined with social activities and sight seeing of the great north coast by our visiting lecturers.

J. E. TROTTER,
Honorary Secretary.

South Coast Local Association.

A most successful year was enjoyed by the local branch. The Post-Graduate Committee was most helpful in allocating a number of post-graduate lecturers, namely, Dr. Jarvis Nye, Dr. Richard Row, Dr. G. B. Wilson and Dr. G. Nielson.

The membership increased by four during the past twelve months, making a total of sixteen members.

Increase of fees was discussed and certain increases were adopted from June 1, 1955, mainly in after hours and week-end treatments.

The local association intends to send a representative to the annual conference of local associations to be held on September 2, 1955, at British Medical Association House.

R. F. GREGG,
Honorary Secretary.

South Burnett Medical Association.

Two meetings were held during the year, one at Nanango when Dr. Athol Robertson came up and lectured on "Diseases of Respiration", and the other at Kingaroy when Dr. D. Yeates came up and lectured on "Rectal Surgery". Both meetings were well attended and members appreciated the efforts of these gentlemen who came so far to give us their interesting and instructive talks.

K. W. SHAW,
Honorary Secretary.

Townsville Medical Association.

I have to report that the year has been a very busy and exacting one for the Townsville Medical Association. The membership of the Association is thirty-six (36) and everyone has taken an active interest in the activities of the association.

Meetings were held fortnightly throughout the year. There were seven clinical meetings, five business meetings and two film evenings. Lectures during the year were given by Mr. T. U. Ley and Dr. Michael Elyan. Visiting lecturers were Professor McWhirter, Dr. Gregory Murphy and Dr. G. Toakley. These lectures were of a high standard and were much appreciated.

By favour of State Council we were visited by Dr. Alan Lee. His was one of the most informative discussions we have had, as it gave us a very good appraisal of the unselfish work of the Council on behalf of all members of the British Medical Association and all aspects of the National Health Service.

During the period August 30 to September 4, 1954, a medical conference was held at Townsville, at which ninety-six (96) practitioners from all over eastern Australia attended.

This association will always be indebted to General Norris for his inaugural address, "Over the Hills and Not So Very Far Away", an address that will be well remembered by the people of Townsville.

All the lectures given at the conference were by practitioners of North Queensland, and it is the intention of the association to publish these lectures for our files.

The year's activities concluded with a dinner at which twenty-eight (28) members attended. This was a successful and very pleasant way of winding up the year's work.

K. L. KING,
Honorary Secretary.

General Practitioner Group (British Medical Association)

The General Practitioner Group has not been particularly active during the past year, owing to the increasing importance of the work of the Regional Faculty of the College of General Practitioners. However, it is emphasized that the General Practitioner Group is to continue to exist as such in its present form.

The annual general meeting of the Group was held on Friday, August 27, 1954. There were fourteen (14) members present. The Chairman, Dr. H. Stuart Patterson, gave an outline of the activities of the Group for the year 1953-1954, and pointed out the need for the continued existence of the General Practitioner Group for work in the medico-political field in relation to the British Medical Association.

Matters discussed at the meeting included various aspects of the Medical Benefits Fund, annual subscriptions to the Group and the method of collection, National Health Service and Pensioner Medical Service prescriptions, and notification of candidates for the Branch Council of their success or otherwise in the elections.

B. N. ADSETT,
Acting Honorary Secretary.

Sections for Study of Special Branches of Medical Knowledge.

Ophthalmological Society of Australia (British Medical Association).

A dinner was held in honour of Mr. J. H. Doggart, F.R.C.S., of London, who gave us an address on his impressions of the International Congress of Ophthalmology.

Delegates were sent to the State Council to discuss ophthalmic benefits under the *National Health Act*.

We have written to the Minister of Health and Home Affairs asking for corneal grafting legislation to be introduced.

The following office bearers were elected at the annual general meeting on June 29, 1955: President, Dr. Peter B. English; Secretary, Dr. Brian G. Wilson; Treasurer, Dr. Fergus M. Yeates; Federal Councillor, Dr. A. Harrison; Prevention of Blindness Committee, Dr. Harrison, Dr. Wilson and Dr. Yeates; Federal Orthoptic Board, Dr. Yeates; State Orthoptic Board, Dr. F. Garrett Scoles, Dr. O. W. Salkeld.

O. W. SALKELD,
Honorary Secretary.

Orthopædic Section.

During the past year the Orthopædic Section has met on one occasion and this meeting was chiefly of a business nature. Matters relating to the Workers' Compensation Schedule of Fees were discussed and a subcommittee appointed to make recommendations to Council on amendments to the schedule.

ANTHONY MCSWEENEY,
Honorary Secretary.

Pædiatric Section.

There are now sixteen members of this section, the Chairman being Dr. P. A. Earnshaw and the Honorary Secretary, Dr. N. G. Anderson.

Clinical meetings were held at the Mater Children's Hospital on November 12, 1954, and at the Hospital for Sick Children, Herston, on May 31, 1955. A business meeting was held on November 12, 1954.

N. G. ANDERSON,
Honorary Secretary.

Radiological Section.

We were very pleased to welcome a distinguished radiologist from London, Dr. Peter Kerley, in March of this year. He gave very interesting and instructive lectures and demonstrations and he was entertained at Dr. B. L. W. Clarke's residence by the Queensland members of the College of Radiologists.

Two clinical meetings were held during the year. On November 25 a meeting was held to which orthopædists were invited. Dr. E. D. Johnston presented a paper on "Bone Metastases" and many of those present, including both orthopædists and radiologists, showed X-ray films of interesting cases. On July 7 talks were given by members of the Queensland Radium Institute. Dr. K. S. Mowatt spoke on "Treatment of Carcinoma of the Breast by Simple Mastectomy and Radiotherapy" and Dr. K. W. Mead on "Diagnostic X-Ray Procedures in the Planning and Verification of Radiotherapeutic Techniques".

The next Australasian Medical Congress of the British Medical Association is to be held in Sydney in August, 1955, and Dr. B. L. W. Clarke has been appointed Chairman of the Radiological Section. All members have been circularized *re* submission of papers.

There has been considerable discussion regarding the inequitable salaries paid to members of the Queensland Radium Institute. A letter was sent on the question to the Federal Council on October 25, 1954, and the Queensland Branch of the British Medical Association and the Director-General of Health of Queensland were also approached. Definite progress has been made.

A letter was received on February 22, 1955, from the Queensland Branch of the British Medical Association asking for a review of Workers' Compensation fees. A report was sent under three headings: (i) "Present Fees", (ii) "Suggested New Fees", (iii) "Repatriation Fees" (for comparison).

The annual meeting will be held on August 5, when the election of office bearers for the coming year will take place.

The Queensland Branch has been honoured this year by the appointment of Dr. B. L. W. Clarke as President of the Federal Council of the College of Radiologists.

H. MASEL,
Honorary Secretary.

Queensland Post-Graduate Medical Education Committee.

Representatives of the British Medical Association on the Post-Graduate Medical Education Committee for this year are Dr. Alan E. Lee, Dr. B. N. Adsett and Dr. Charles Roe.

Continuing a programme of gradual expansion of activities, new ventures have been undertaken during the past year with success while all previous activities have been continued.

The following overseas lecturers have visited Brisbane under the auspices of the Committee: Professor S. D. Porteus (Honolulu), Professor E. B. Astwood (Boston), Dr. Robert Shaw (Texas), Dr. J. T. Ingram (Leeds), Dr. J. C. Scadding (London), Dr. Peter Kerley (London), Professor Ronald Hare (London). A lecture tour of Queensland was arranged in conjunction with the Queensland Radium Institute for Professor McWhirter (Edinburgh).

Country centres have been visited by various lecturers for the Committee as in previous years: Bundaberg (2), Dalby (2), Gayndah (2), Gympie/Maryborough (6), Ipswich (6), Nambour (3), Mackay/Rockhampton (4), Townsville/Cairns/Innisfail (2), South Burnett (3), South Coast (4), Toowoomba (4), Warwick (1), Lismore (1). This programme will be continued with some expansion.

In addition, a full week-end post-graduate course was held in Toowoomba. This "experiment" was a marked success both academically and socially and it is anticipated that similar courses will be arranged in other centres in conjunction with other local associations of the Branch.

The Post-Graduate Week held in August in conjunction with the British Medical Association was also reported as being one of the most successful courses of this nature arranged by the Committee.

The course of weekly lectures in advanced surgery has continued throughout the year and has fulfilled its objective of assisting candidates materially in preparation for higher surgical diplomas. A weekly course of lectures in advanced medicine has also been in progress for nearly twelve months and has been well attended throughout. The many lecturers in both these courses have willingly given their services in an honorary capacity and the standard of lectures and lecturing has been very high. The Committee extends sincere thanks to all concerned and looks forward to their continued cooperation. Weekly lectures and demonstrations have also been held in physiology and anatomy during the first half of this year.

The Committee fulfils many varied functions in relationship to post-graduate work. Included in these activities, 21 practitioners have been sponsored during the year and several others assisted in other ways in arranging their post-graduate activities overseas. Facilities available in Queensland for post-graduate education for graduates of member countries of the Colombo Plan have been investigated and a report submitted to the Australian Federation of Post-Graduate Committees.

The wire recorder has been replaced by a standard tape recorder and the lectures of several overseas lecturers are now available on tape. These may be obtained for use by local associations upon application to the Director.

The ready assistance given by the staff of the British Medical Association and British Medical Agency is deeply appreciated by the Committee.

GRANTLEY STABLE,
Director, Post-Graduate Studies.

Retirement of Dean of Faculty of Medicine.

The Association desires to place on record its sincere appreciation of all that Dr. E. S. Meyers has done on behalf of the profession during his long service as Dean of the Faculty of Medicine of the University of Queensland. He is succeeded by Professor H. J. Wilkinson, to whom the Association extends its congratulations and good wishes.

Queensland Health Education Council.

Members of the Queensland Health Education Council are appointed by the Governor-in-Council.

Of the sixteen members who form the Council, five are doctors, all of them members of the British Medical Association and one being the official British Medical Association representative; two are in private practice and the remainder in full-time Government service.

The State Government's grant to the Council last year was £20,000. More than £4500 of this was spent on publications. Displays in shows, window displays, radio sessions, films and slides have cost nearly £3000.

Criticisms and dissatisfaction—yes; but only from members of the Council about their own activities and then accompanied by constructive suggestions.

Not only publicity but research is carried on. Cancer and accident surveys are being organized. There is a constant search for new fields of work. Mistakes are being made and will continue to be made and remedied.

A body very much alive, and, as it should be, healthy.

W. J. SAXTON,
British Medical Association Representative.

QUEENSLAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

(INCORPORATED.)

Balance Sheet as at June 30, 1955.

	£ s. d.	£ s. d.
FIXED LIABILITIES:		
Loan from Queensland Medical Land Investment Company Limited		4,650 0 0
CURRENT LIABILITIES:		
Provision for Long Service Leave	200 0 0	
Provision for Income Tax	40 0 0	
Subscriptions for Remittance to—		
British Medical Association, London .. 55 15 9		
Australasian Medical Publishing Company Limited, Sydney .. 36 5 0		
World Medical Association 10 0		
	92 10 9	
Deposit held on tender for removal of Bartley Street Cottage	30 0 0	
		362 10 9
ASSOCIATION FUNDS:		
Accumulation Fund	17,108 15 3	
Sinking Fund	4,031 15 11	
Superannuation Fund	1,174 13 7	
		22,315 4 9
		£27,327 15 6

	£ s. d.	£ s. d.	£ s. d.
FIXED ASSETS:			
At cost, less depreciation.			
Land and Buildings—			
B.M.A. House .. 2,135 8 9			
Bartley Street Property 1,303 12 10			
Bartley Street Cottage Property .. 2,058 8 1			
	5,497 9 8		
Typewriters, Bookcases, Balopticon and Furniture	353 0 0		
Gestetner Duplicator	180 9 8		
Refrigeration Installation	62 4 9		
Fire Alarm System	31 7 8		
Wire Recorder	29 6 10		
Bancroft Medals and Collar	5 17 0		
Library—at valuation	150 0 0		
			6,309 15 7
INVESTMENTS:			
Queensland Medical Land Investment Company Limited — 5,950 shares of £1 each paid to 10/- each at cost	2,975 0 0		
Southern Electric Authority of Queensland — £2,000 — 4¼% Inscribed Stock—at cost	2,000 0 0		
British Medical Agency of Queensland Proprietary Limited—1,000 shares of £1 each, fully paid at cost	1,000 0 0		
Australasian Medical Publishing Company Limited, Sydney—			
5% Series "C" Debentures—at cost .. 50 0 0			
5% Series "D" Debentures—at cost .. 5 0 0			
3¾% Series "E" Debentures—at cost .. 3,200 0 0			
Advance not yet converted to Series "E" Debentures .. 82 19 6			
	3,337 19 6		
Australian Consolidated Inscribed Stock—at cost—			
3¼% maturing September 15, 1959 .. 1,500 0 0			
3¼% maturing October 15, 1960 .. 300 0 0			
	1,800 0 0		
			11,112 19 6
CURRENT ASSETS:			
English, Scottish & Australian Bank Limited	4,462 14 4		
British Medical Agency of Queensland Proprietary Limited	208 0 0		
Cash	15 16 7		
Deposits on Electricity and Gas Meters	12 0 0		
			4,698 10 11
FUND INVESTMENTS:			
Sinking Fund—			
Australian Consolidated Inscribed Stock—			
£280 3¾% maturing December 15, 1965 —at cost 280 0 0			
£90 3¼% maturing October 15, 1960 —at cost 90 0 0			
£2,000 3¾% maturing August 18, 1964 —at cost 2,000 0 0			
	2,370 0 0		
Commonwealth Savings Bank, Brisbane	1,661 15 11		
	4,031 15 11		
Superannuation Fund—			
Commonwealth Savings Bank, Brisbane	1,174 13 7		
			5,206 9 6
			£27,327 15 6

Auditors' Report.

We have compared the above Balance Sheet with the books, accounts and vouchers of the Queensland Branch of the British Medical Association (Incorporated), and have obtained all the information and explanations we have required.

In our opinion, the Balance Sheet is properly drawn up to exhibit a true and correct view of the state of the Association's affairs as at June 30, 1955, according to the best of our information and the explanations given to us, and as shown by the books of the Association.

The Register of Members and other records which the Company is required to keep by the Companies Acts of 1931-1954, or by its Articles, have, in our opinion, been properly kept.

R. G. GROOM & Co.,
Chartered Accountants (Aust.),

Brisbane,
July 29, 1955.

W. J. SAXTON,
Acting Honorary Treasurer.

QUEENSLAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

(INCORPORATED.)

Revenue Account for Twelve Months ended June 30, 1955.

EXPENDITURE.

1955—June 30.	£ s. d.	£ s. d.
To Branch Expenses	3,086 11 2	
„ Library Expenditure	288 19 6	
„ Depreciation of Equipment	24 5 7	
		3,399 16 3
„ Architects' Fees—		
re proposed alterations to B.M.A. House	36 15 0	
re former (1947) rejected plans for proposed new building	300 0 0	
		336 15 0
„ Provision for Staff Superannuation		120 0 0
„ Federal Council—Capitation Fees		1,138 4 0
„ Provision for Income Tax		40 0 0
„ Net Surplus for Year—Transferred to Accumulation Account		1,664 6 1
		£6,699 1 4

INCOME.

1955—June 30.	£ s. d.	£ s. d.
By Branch and Organization Fund—Subscriptions		5,847 11 7
„ Portion of Journal Subscriptions—To be invested in Australasian Medical Publishing Company Limited, Sydney, Series "E" Debentures		576 12 6
		6,424 4 1
„ B.M.A. House and Bartley Street House Property—		
Rents	631 19 7	
Less—		
Depreciation 85 16 4		
Other Expenses 777 6 3		
	863 2 7	
		231 3 0
„ Interest—		
Southern Electric Authority of Queensland Inscribed Stock	84 19 8	
Australasian Medical Publishing Company Limited Debentures and Funds Held	87 14 7	
Commonwealth Government Inscribed Stock	58 10 0	
		231 4 3
„ General—		
Proceeds Clerical Assistance and Sundries	218 10 0	
Directors' Fees—Yorkshire Insurance Company Limited	50 0 0	
Sale of Diet Sheets and Lists of Members	6 6 0	
		274 16 0
		£6,699 1 4

Federal Council of the British Medical Association in Australia.

Three meetings of the Federal Council were held during the year: on August 30 to September 1, 1954, in Brisbane; on October 28, 1954, in Canberra; and on February 14 to 16, 1955, in Melbourne.

Dr. H. W. Horn and Dr. Alan E. Lee represented the Branch at these meetings.

Full reports of the business transacted have been published in THE MEDICAL JOURNAL OF AUSTRALIA.

Dr. H. W. Horn represented the Federal Council at the Eighth General Assembly of the World Medical Association held in Rome in September/October, 1954.

Council wishes to express its deep regret at the great loss sustained by the Federal Council in the death of its late President, Sir Archibald Collins.

Australasian Medical Congress (British Medical Association).

Ninth Session, Sydney, August 20-27, 1955.

Up to date about seventy members of the Queensland Branch have joined the Congress. Our President, Dr. H. Stuart Patterson, has been appointed a Vice-President of Congress. Dr. David Henderson is the Honorary Local Secretary for Queensland.

Social.

A fork dinner was held on August 25 at 29 Murray Street, and overseas guests were Professor E. B. Astwood and Mrs. Astwood and Dr. Robert Shaw, American visitors to Brisbane for the Post-Graduate Week. About 250 members attended. The conveners responsible for the success of the function were Dr. B. N. Adsett and Dr. Charles Roe.

On July 23 a Council dinner was held at the United Service Club. Sir Alexander Murphy, K.B., M.C., M.D., was a guest.

Members of the Federal Council from other States, and the Editor of THE MEDICAL JOURNAL OF AUSTRALIA, Dr. Mervyn Archdall, were entertained at dinner at the Hotel Carlton on August 31, 1954.

The annual golf match between doctors and dentists was held on November 14 at the Indooroopilly Golf Club. The dentists won the match.

Congratulations.

The Council extended congratulations to the late Sir Archibald Collins and to Sir Albert Coates on behalf of the members of the Branch on the honour of Knight Bachelor conferred upon them by Her Majesty the Queen. Congratulations were also conveyed to Dr. Allan Vickers, who was included in Her Majesty's Birthday Honours List, and to Sir Henry Newland, who was awarded the gold medal of the Association by the Council of the British Medical Association in London.

Conclusion.

One of the happiest recollections of a President of the British Medical Association at the end of his term of office is of gatherings—social, clinical, medico-political—it has been his privilege to attend.

And one of the most valuable contributions a President can make during his year of office is to foster and maintain good relations both within and outside the profession.

In so far as the profession itself is concerned, it is teamwork that counts. With medicine divided into a multitude of well defined compartments, it is most important that there should be harmony and understanding between the members of the various groups and specialties. Sometimes the Council of the Branch is accused of partiality towards one or other type of practice, but it is true to say that Council is always prepared to take up the cudgels in support of its members of whatever form of practice, providing they ask its help. Two groups on whose behalf much time was spent during the past year have been the Radium Institute and the Section of Anæsthetists. Much patient negotiating has also been going on with the State Government Insurance Commissioner. Requests for help of one sort or another are constantly coming in from doctors all over the State and advice is given to the public, too, who lay complaints against members of the profession, for the British Medical Association has obligations also in this regard.

This year several members of Council again made visits to various local associations. So much have they been appreciated by members of the local associations that it is certain they will be continued. It helps members at a distance to realize what Council is doing on their behalf and it gives them an opportunity of voicing grievances to councillors which they would possibly never get round to writing officially. May it not be long, however, before we

QUEENSLAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

(INCORPORATED.)

GENERAL FUND.

Statement of Receipts and Payments for Twelve Months ended June 30, 1955.

RECEIPTS.	£ s. d.	£ s. d.
1954—July 1.		
To Funds at July 1, 1954—		
E.S. & A. Bank Limited—Current Account	5,079 7 5	
Cash	20 0 0	
		5,099 7 5
1955—June 30.		
To Subscriptions—		
Queensland Branch Subscriptions	3,871 13 1	
Organization Fund, Queensland Branch	1,975 18 6	
For Remittance to British Medical Association, London	1,924 5 4	
For Remittance *re* Medical Journals	1,216 18 2	
Medical Students' Loan Fund	69 9 6	
Sinking Fund	534 3 0	
World Medical Association	68 1 0	
		9,660 8 7
„ General—		
Rents—		
B.M.A. House .. 460 13 0		
Bartley Street Property .. 236 6 7		
	696 19 7	
Clerical Assistance and Hire of Office Equipment	218 10 0	
Interest on Southern Electric Authority of Queensland Inscribed Stock	84 19 8	
Australasian Medical Publishing Company Limited—		
Interest on Funds Held .. 4 7 1		
Interest on Debentures .. 83 7 6		
	87 14 7	
Interest on Commonwealth Inscribed Stock	58 10 0	
Directors' Fees—Yorkshire Insurance Company Limited	50 0 0	
Proceeds Sale Diet Sheets and Lists of Members	6 6 0	
Tender Deposit for removal of cottage on Bartley Street Land	30 0 0	
		1,232 19 10
		£15,992 15 10

PAYMENTS.	£ s. d.	£ s. d.
1955—June 30.		
By Amounts remitted on account of Subscriptions collected to—		
British Medical Association, London	1,912 1 8	
Australasian Medical Publishing Company Limited, Sydney—		
Publication of Journals	634 9 11	
To be applied to purchase of Series "E" 3¾% Debentures	576 12 6	
Medical Students' Loan Fund	77 3 6	
Sinking Fund	535 4 0	
World Medical Association	67 11 0	
		3,803 2 7
„ Federal Council—		
Capitation Fee (1955)		1,138 4 0
„ Branch Expenses—		
Salaries, Audit and Honoraria	2,131 5 0	
Printing, Stationery, Postages and Telephone	503 0 3	
Bank Charges, Functions, Lighting and Sundries	432 4 3	
		3,066 9 6
„ Property Expenses—		
B.M.A. House:		
Rates and State Land Tax .. 430 15 6		
Insurance, Repairs and Maintenance .. 256 8 2		
	687 3 8	
Bartley Street Property:		
Rates and State Land Tax .. 57 12 10		
Insurance, Repairs and Maintenance .. 32 9 9		
	90 2 7	
		777 6 3
„ Purchase of Bartley Street Cottage Property		2,058 8 1
„ General—		
Library Expenditure	288 19 6	
Transfer to Superannuation Fund	120 0 0	
Purchase—Furniture and Equipment—		
Duplicating Machine .. 182 0 0		
Book Shelves .. 35 0 0		
Table .. 8 0 0		
	225 0 0	
Architects' Fees *re* proposed alterations to B.M.A. House	36 15 0	
		670 14 6
„ Funds at June 30, 1955—		
E.S. & A. Bank Limited, Brisbane	4,462 14 4	
Cash	15 16 7	
		4,478 10 11
		£15,992 15 10

have regional representation on the Council, with representatives for all parts of the State sitting on the Council.

By and large Pensioner Medical Service work is working smoothly. What action the Government intends to take in the future in regard to those newly qualifying for pensions it is impossible to state. Your State Council, however, no less than Federal Council, is closely watching events and will use every endeavour to prevent exploitation of the profession.

In the matter of ethics, a number of breaches have come before the notice of Council. Some have been dealt with by the State Committee of Inquiry. The existence of this body is certain to have a salutary effect in minimizing abuses of the Pensioner Medical Service and Pharmaceutical Benefits Act by a small minority of the profession. Sometimes such abuses have been caused by thoughtlessness, but it is important that members should realize that the profession as a whole is brought into disrepute by the unfavourable publicity which often results.

The position in regard to locums and assistants is still very difficult and is likely to remain so for some time. It is hoped, however, that the newly formed College of General Practitioners may do much for the country doctor in the way of helping him to undertake post-graduate work and research and therefore enabling him to feel he has not lost touch with what is going on at the centre of things. If added to this a pool of locums could be maintained to supply those doctors in the country requiring holidays and refresher post-graduate courses, the country doctor would indeed lose his sense of isolation and frustration, and it is believed that country posts would be much less difficult to fill in consequence.

The matter of fees has also exercised the minds of Council to a greater extent than formerly and it is apparent that from now on Council is going to take an increasing interest in fees charged by the profession. Local associations have therefore been told that in future all proposals to vary fees should be referred to Council before being implemented.

In the past the profession has not always received a good Press. During the past year we have striven to improve relations with Press and public and I believe there is better understanding than that which existed some years ago. The day is gone when we can remain aloof in an ivory tower. We have to accept the fact that the world is vitally interested in medicine.

Three years ago the annual meeting of our Association became a great occasion, in which ceremony and dignity were combined. Last year oratory was added and the

Bancroft Oration delivered by Sir Alexander Murphy blended to perfection with the annual meeting held at the University at St. Lucia. As in the previous two years, full academic dress was worn and distinguished official guests and members' wives and friends were again invited to attend. I hope the happy and colourful ceremony will be perpetuated and that it will continue to be held within the University.

May I remind you again of the need we have for funds to build our new B.M.A. House in Queensland. This building may not benefit to any extent those of us who are older, but it will serve to remind those who follow us that those who went before built not only for themselves.

To my predecessor, Dr. W. J. Saxton, I paid tribute at the last annual meeting. I want also to say how deeply I have appreciated the work the Chairman of Council has done during the year. It is possible that a Chairman of Council and a President of the Association could be at loggerheads. Dr. Stubbs Brown's unfailing tact, good humour and courtesy made such an event impossible. Dr. Daniel Hart, the Honorary Secretary, has also been the most willing and helpful of secretaries. And to Dr. John Wagner, the Honorary Treasurer, to Dr. David Jackson, the Chairman of the Organization Subcommittee, to the chairmen and members of all subcommittees and to those who represented the Association in various capacities during the year, a debt of gratitude is acknowledged. Mention should also be made of the happy spirit that has existed in both the Council and its Executive.

As for our lay Secretary, Mrs. Spooner, like an army sergeant-major, has broken in generation after generation of new presidents, and to her and to her staff I owe much for the unfailing helpfulness shown me during the past year.

And lastly to my successor, Dr. Alan E. Lee, I wish a very happy year in office.

H. STUART PATTERSON.
President.

BALANCE SHEET AND FINANCIAL STATEMENT.

The balance sheet and financial statement for the year ended June 30, 1955, copies of which had been circulated to members of the Branch, were received on the motion of Dr. W. J. Saxton, seconded by Dr. T. V. Stubbs Brown, and seconded on the motion of Dr. N. Gutteridge, seconded by Dr. F. W. R. Lukin. The financial statements are published herewith.

OFFICE BEARERS.

The President announced the election of office bearers and councillors for the ensuing year as follows:

President: Dr. Alan E. Lee.

Past President: Dr. H. Stuart Patterson.

Honorary Secretary: Dr. D. R. L. Hart.

Councillors: Elected in 1955—Dr. A. D. Adsett, Dr. A. F. Knyvett, Dr. John Nye, Dr. Charles Roe, Dr. W. J. Saxton, Dr. J. G. Wagner, Dr. Donald Watson. Elected in 1954 for two years—Dr. Arthur Crawford, Dr. T. V. Stubbs Brown, Dr. B. L. W. Clarke, Dr. H. W. Horn, Dr. D. C. Jackson, Dr. H. R. Love, Dr. W. H. Steel.

ETHICS COMMITTEE.

The following were reelected members of the Ethics Committee: Dr. Val McDowall, Dr. L. J. J. Nye, Dr. J. J. Power, Dr. R. G. Quinn, Dr. Norman Sherwood, Dr. F. W. R. Lukin, Sir Alexander Murphy.

ELECTION OF AUDITORS.

Messrs. R. G. Groom and Company, Chartered Accountants (Australia), were reelected auditors on the motion of Dr. H. W. Horn, seconded by Dr. W. J. Saxton, at a remuneration to be arranged by the Council.

VOTE OF THANKS.

A vote of thanks was passed on the motion of Dr. A. E. Lee, seconded by Dr. H. W. Horn, to Mrs. Spooner and her staff.

ADJOURNMENT OF MEETING.

The meeting was then adjourned and resumed at 8.30 p.m. in the Main Hall, University of Queensland, St. Lucia, in the presence of His Excellency the Governor, Sir John Laverack, and Lady Laverack. The President, Dr. H. Stuart Patterson, was in the chair.

MEMORIAL ROLL.

The President called upon Dr. W. J. Saxton, the Immediate Past President, who read the memorial roll of members of the Branch, all present standing.

PRESENTATION OF PRIZES.

The following prizes awarded to medical graduates for 1954 were presented by the President:

Memorial Prize of the Queensland Branch of the British Medical Association: Ralph Lionel Hockin, M.B., B.S.

Harold Plant Memorial Prize: Bruce Kynaston, M.B., B.S.

ADDRESS BY DR. A. TALBOT ROGERS.

Dr. A. Talbot Rogers, who had come to Australia as the official representative of the Parent Body to attend the Ninth Session of the Australasian Medical Congress (British Medical Association), gave an address entitled "General Practice" (see page 753).

INDUCTION OF NEW PRESIDENT.

The retiring President introduced the incoming President, Dr. A. E. Lee, and installed him in the presidential chair.

PRESIDENT'S ADDRESS.

The incoming President, Dr. A. E. Lee, delivered his president's address (see page 749).

NEW SOUTH WALES BRANCH NEWS.

Annual Branch Prize for an Essay on a Scientific Subject.

THE following are the conditions applicable to the Annual Branch Prize established by the New South Wales Branch of the British Medical Association for an essay on a scientific subject.

1. The Council of the New South Wales Branch of the British Medical Association will each year award a prize of 100 guineas and a bronze medallion for an essay on a scientific subject.

2. Entries for the prize competition will be received from any ordinary member of a Branch of the British Medical Association in Australia; entries will close at midday on November 30, and the prize will be awarded to the successful essayist at the succeeding annual meeting.

3. Essays will be on a subject chosen for the purpose and should not be longer than 12,000 words. The use of illustrations and graphs will be permitted. Where necessary complete references should be given.

4. Work that has already been published will not be acceptable, but no objection will be raised if a small preliminary communication to establish priority has been accepted for publication by or has been published in a reputable medical journal.

5. Intending competitors shall notify the Medical Secretary of the New South Wales Branch of their intention to submit contributions at least two months before the closing date.

6. Two or more examiners shall be appointed each year.

7. The winning essay shall become the property of the New South Wales Branch Council, which will submit it for publication in an appropriate journal. If in the opinion of the judges no essay is of sufficient merit, no award shall be made.

8. Three copies of an essay shall be submitted. Essays are to be typewritten, and double-spaced lines are to be used. Each essay shall bear a motto or *nom de plume*, and shall be accompanied by a sealed envelope containing the author's name and qualifications.

9. The Organization and Science Committee of Council shall be the committee controlling the award.

The subject chosen for the year 1956 is "Infective Hepatitis: Its Incidence and its Sequelæ".

Notification of intention to submit contributions must be forwarded to the Medical Secretary, British Medical Association, New South Wales Branch, 135 Macquarie Street, Sydney, not later than September 30, 1956.

Correspondence.

ADVERTISEMENTS AND SAMPLES FROM DRUG HOUSES.

SIR: At frequent intervals I receive free samples of various drugs for clinical trial. These samples were not requested, are often dangerous, and are sent to my private address. In these circumstances they would be readily accessible to small children in the neighbourhood.

I consider the action of these firms to be wrong and dangerous. A legal friend advises me that, in the event of a tragedy by poisoning, a firm might be held liable for their act.

Yours, etc.,

Sandy Bay, Hobart, August 10, 1955. CAMPBELL DUNCAN.

THE MEDICAL SERVICES OF THE AUSTRALIAN ARMY.

SIR: Laudable as is Dr. T. J. Ritchie's plea for young graduates to join the peace-time services (M. J. AUSTRALIA, August 16, 1955), his comments on the attitude of senior men are, to my mind, hasty. There is apparently a reluctance to serve among young graduates, but the lack of proselytizing by the senior men is surely more often due to a desire to avoid snorting like an old war horse. I personally feel that the use of military titles is best left to those who are or have been members of the Regular Forces. I heartily support Dr. Ritchie in his advice to young men to obtain training for war in peace-time, if only on the basis that knowledge is strength.

Yours, etc.,

235 Macquarie Street, Sydney, August 12, 1955. JAMES MOLESWORTH.

THE PENSIONER MEDICAL SERVICE.

SIR: I read with amazement that the Federal Council has adopted as policy the memorandum of Dr. H. C. Colville with regard to the Pensioner Medical Service. The lack of any comments I find even more amazing. The suggestion of medical vouchers being issued to the pensioners has been accepted as grossly impracticable by most general practitioners (who, after all, donate the pensioner concession to the Commonwealth Government). I regard my pensioner patients as being a fair sample of their type and fully realize that on most occasions through no real fault of their own they would either deny all knowledge of the forms, fail to bring them, lose them or use them for another purpose: and in this case are we to wait minutes, hours, weeks or even months until the form is produced before we render the service? A change from the present system to the one suggested I would regard as grossly retrogressive and productive only of humbug.

Yours, etc.,

42 Northumberland Street, Tusmore, South Australia. October 14, 1955. J. F. HARLEY.

Post-Graduate Work.

THE POST-GRADUATE COMMITTEE IN MEDICINE IN THE UNIVERSITY OF SYDNEY.

Annual Subscription Course.

THE Post-Graduate Committee in Medicine in the University of Sydney announces that Dr. Edith Potter, of the Department of Gynæcology and Obstetrics, Chicago Lying-In Hospital, will lecture on "Principal Causes of Peri-Natal Mortality" on Wednesday, November 30, 1955, at 8.15 p.m., in the Stawell Hall, 145 Macquarie Street, Sydney. Dr. Potter is well known for her work on fœtal and neo-

DISEASES NOTIFIED IN EACH STATE AND TERRITORY OF AUSTRALIA FOR THE WEEK ENDED OCTOBER 15, 1955.[1]

Disease.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Northern Territory.	Australian Capital Territory.	Australia.
Acute Rheumatism	1	..	5(1)	2	..	..	..	..	8
Amœbiasis	..	..	..	..	..	..	..	..	..
Ancylostomiasis	..	..	..	..	..	..	..	..	..
Anthrax	..	..	..	..	..	..	..	..	..
Bilharziasis	..	..	..	..	..	..	..	..	..
Brucellosis	..	..	..	..	1	..	..	..	1
Cholera	..	..	..	..	..	..	..	..	..
Chorea (St. Vitus)	1	..	..	..	..	..	..	..	1
Dengue	..	..	..	..	..	..	..	..	..
Diarrhœa (Infantile)	5(3)	9(8)	2(2)	..	..	..	..	4	20
Diphtheria	5(3)	1	2	..	1(1)	..	..	..	9
Dysentery (Bacillary)	..	2(2)	..	..	..	..	..	..	2
Encephalitis	..	..	..	1(1)	..	..	..	..	1
Filariasis	..	..	..	..	..	..	..	..	..
Homologous Serum Jaundice	..	..	..	..	..	..	..	..	..
Hydatid	..	1(1)	..	..	..	..	..	..	1
Infective Hepatitis	58(37)	117(49)	..	16(11)	3(3)	1	..	1	196
Lead Poisoning	..	..	1	..	..	..	..	..	1
Leprosy	..	..	..	..	4	..	..	..	4
Leptospirosis	..	..	4	..	..	..	..	..	4
Malaria	..	1(1)	..	..	..	..	..	..	1
Meningococcal Infection	3(2)	2(2)	..	..	1	..	..	..	6
Ophthalmia	..	..	..	..	..	..	..	..	..
Ornithosis	..	..	..	..	..	..	..	..	..
Paratyphoid	..	..	..	..	1(1)	..	..	..	1
Plague	..	..	..	..	..	..	..	..	..
Poliomyelitis	4(2)	..	..	6(4)	..	..	1	..	11
Puerperal Fever	..	..	..	..	..	..	..	..	..
Rubella	..	82(36)	..	4(3)	..	..	..	..	86
Salmonella Infection	..	..	..	..	..	..	..	..	..
Scarlet Fever	17(13)	33(23)	22(7)	3(3)	1(1)	1	..	..	77
Smallpox	..	..	..	..	..	..	..	..	..
Tetanus	..	1	1	..	..	..	..	..	2
Trachoma	..	..	..	..	22	..	..	..	22
Trichinosis	..	..	..	..	..	..	..	..	..
Tuberculosis	28(18)	13(11)	19(11)	3(3)	7(5)	3(3)	..	..	73
Typhoid Fever	..	..	..	..	..	..	..	..	..
Typhus (Flea-, Mite- and Tick-borne)	..	..	1	..	2(2)	..	..	..	3
Typhus (Louse-borne)	..	..	..	..	..	..	..	..	..
Yellow Fever	..	..	..	..	..	..	..	..	..

[1] Figures in parentheses are those for the metropolitan area.

natal pathology and has written several text-books on her subject. Her lecture will form part of the annual subscription course conducted by the Post-Graduate Committee in Medicine, the annual fee for which is £2 2s. from July 1.

Notice.

SECTION OF INDUSTRIAL MEDICINE: VICTORIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE next meeting of the Section of Industrial Medicine of the Victorian Branch of the British Medical Association will be an inspection of Coornac, the Commonwealth Rehabilitation Centre at 65 Clendon Road, Toorak, at 2 p.m. on Tuesday, November 22, 1955. Occupational therapy, job placement and vocational assessment will be demonstrated.

Medical Prizes.

PRIZE FOR MEDICO-SURGICAL FILM.

THE annual prize awarded by *La Presse médicale* for a medico-surgical film, amounting to 100,000 francs with various other awards, will be presented during the last session of the course of "*Actualités médico-chirurgicales* at the *Faculté de Médecine de Paris* in March, 1956. The prize is awarded only to amateurs for films not previously published, not subsidized and not produced by any laboratory or firm. The judges will consider the instructional value of the films as well as their cinematographic quality. They may be of the silent or sound variety, in colour or in black and white, but must be of 16-millimetre size. The last day for receipt of applications is February 15, 1956, and for receipt of the films themselves is February 20, 1956. However, applications should be sent as soon as possible and be addressed to the Secretary, *La Presse médicale*, 120, Boulevard Saint-Germain, Paris.

DAVID ANDERSON-BERRY PRIZE (1956).

A DAVID ANDERSON-BERRY SILVER-GILT MEDAL, together with a sum of money amounting to about £100, will be awarded in 1956 by the Royal Society of Edinburgh to the person who, in the opinion of the Council, has recently produced the best work on the therapeutical effect of X rays on human diseases. Applications for this prize are invited. They may be based on both published and unpublished work and should be accompanied by copies of the relevant papers. Applications must be in the hands of the General Secretary, Royal Society of Edinburgh, 22 George Street, Edinburgh, 2, not later than March 31, 1956.

The Royal Australasian College of Physicians.

ADMISSIONS TO MEMBERSHIP.

THE following, having satisfied the Board of Censors in Australia, were admitted to membership of The Royal Australasian College of Physicians by the President in October, 1955: Dr. John Ellard, Dr. J. F. Farrar, Dr. J. M. Greenaway, Dr. J. D. Harley, Dr. W. J. Hensley, Dr. George Michell, Dr. J. R. Read, Dr. C. A. Rigg and Dr. J. H. E. Voss, of New South Wales; Dr. W. M. Barrett, Dr. G. P. Brew, Dr. Brian Clerehan, Dr. I. C. Goy, Dr. W. M. Maxwell, Dr. W. G. Miller, Dr. J. F. Niall, Dr. A. H. Penington, Dr. J. N. Santamaria and Dr. Eric Stock, of Victoria; Dr. A. W. Steinbeck, of Queensland; Dr. Michael Drew and Dr. R. E. Russell, of South Australia; Dr. E. S. Bean and Dr. Marie Sadka, of Western Australia.

STOP PRESS.

RECRUITS TO THE AUSTRALIAN ARMY MEDICAL SERVICE.

AFTER the greater part of this issue had gone to press and the forme containing the leading article had been printed, an official announcement was made from Canberra of a scheme to attract young doctors into the army by subsidizing their university training. The details have been set out in the daily Press. If this scheme is successful, it will do much to remedy the present unhappy position.

Deaths.

THE following death has been announced:

MINNETT.—Roy Baldwin Minnett, on October 21, 1955, at Manly, New South Wales.

Diary for the Month.

Nov. 8.—New South Wales Branch, B.M.A.: Executive and Finance Committee.
Nov. 11.—Tasmanian Branch, B.M.A.: Branch Council.
Nov. 14.—Victorian Branch, B.M.A.: Finance Subcommittee.
Nov. 15.—New South Wales Branch, B.M.A.: Medical Politics Committee.
Nov. 16.—Western Australian Branch, B.M.A.: General Meeting.

Medical Appointments: Important Notice.

MEDICAL PRACTITIONERS are requested not to apply for any appointment mentioned below without having first communicated with the Honorary Secretary of the Branch concerned, or with the Medical Secretary of the British Medical Association, Tavistock Square, London, W.C.1.

New South Wales Branch (Medical Secretary, 135 Macquarie Street, Sydney): All contract practice appointments in New South Wales.

Queensland Branch (Honorary Secretary, B.M.A. House, 225 Wickham Terrace, Brisbane, B17): Bundaberg Medical Institute. Members accepting LODGE appointments and those desiring to accept appointments to any COUNTRY HOSPITAL or position outside Australia are advised, in their own interests, to submit a copy of their Agreement to the Council before signing.

South Australian Branch (Honorary Secretary, 80 Brougham Place, North Adelaide): All contract practice appointments in South Australia.

Western Australian Branch (Honorary Secretary, 205 Saint George's Terrace, Perth): Norseman Hospital; all contract practice appointments in Western Australia. All government appointments with the exception of those of the Department of Public Health.

Editorial Notices.

MANUSCRIPTS forwarded to the office of this journal cannot under any circumstances be returned. Original articles forwarded for publication are understood to be offered to THE MEDICAL JOURNAL OF AUSTRALIA alone, unless the contrary be stated.

All communications should be addressed to the Editor, THE MEDICAL JOURNAL OF AUSTRALIA, The Printing House, Seamer Street, Glebe, New South Wales. (*Telephones: MW 2651-2-3.*)

Members and subscribers are requested to notify the Manager, THE MEDICAL JOURNAL OF AUSTRALIA, Seamer Street, Glebe, New South Wales, without delay, of any irregularity in the delivery of this journal. The management cannot accept any responsibility or recognize any claim arising out of non-receipt of journals unless such notification is received within one month.

SUBSCRIPTION RATES.—Medical students and others not receiving THE MEDICAL JOURNAL OF AUSTRALIA in virtue of membership of the Branches of the British Medical Association in the Commonwealth can become subscribers to the journal by applying to the Manager or through the usual agents and booksellers. Subscriptions can commence at the beginning of any quarter and are renewable on December 31. The rate is £5 *per annum* within Australia and the British Commonwealth of Nations, and £6 10s. *per annum* within America and foreign countries, payable in advance.